DOCUMENT RESUME

ED 193 200 SP 016 799

TITLE	Information Collection. Time Leader's Guide. Basic Skills Instructional Improvement Program.
INSTITUTION	Research for Better Schools, Inc., Philadelphia, Pa.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	Sep 80
NOTE	278p.: For related documents, see SP 016 300-802.
EDRS PRICE	MF01/PC12 Plus Postage.
DESCRIPTORS	Classroom Observation Techniques; *Data Collection; Elementary Secondary Education; Inservice Teacher Education; *Instructional Improvement; Instructional Innovation; Instructional Materials; Learning Activities; *Persistence; *Student Improvement; *Time Factors (Learning)

ABSTRACT

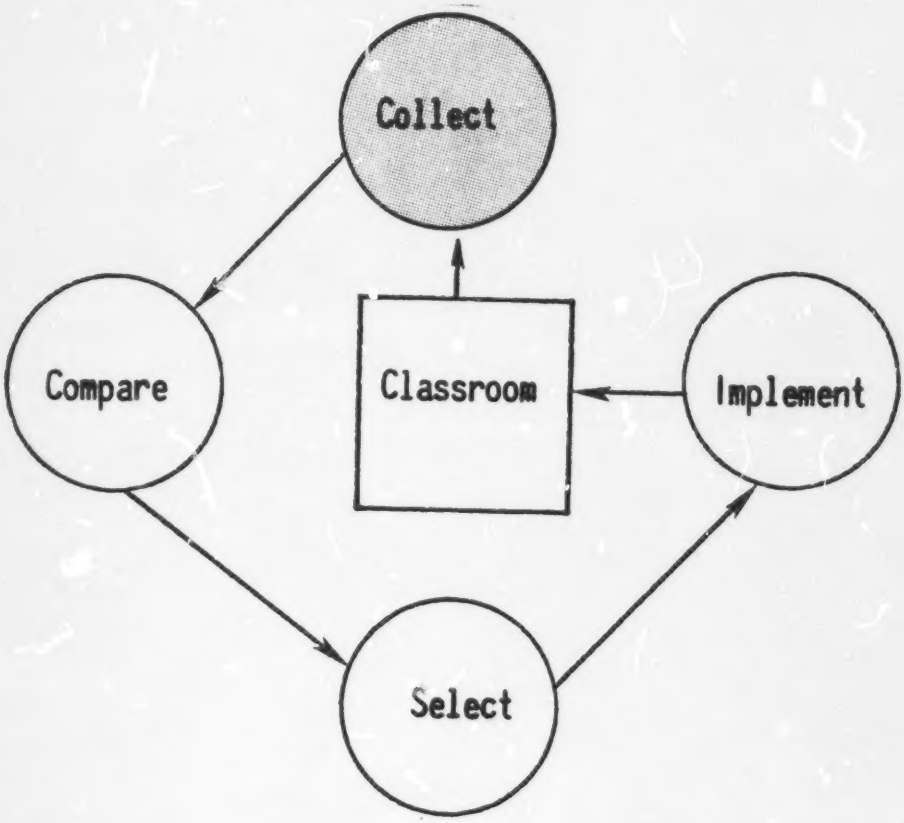
The improvement of student engaged time leads to improved instruction and greater academic achievement. Major steps for improving instruction by improving student engaged time are information collection, comparison of information and identification of strategies, selection and preparation of strategies, and implementation and re-evaluation. This leader's guide, designed to cover the topic of information collection, can be used to: (1) teach procedures for information collection on time: (2) train classroom observers; and (3) collect information on allocated time and engagement rate in classrooms. Instructional materials to be used in this program are included. (CJ)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

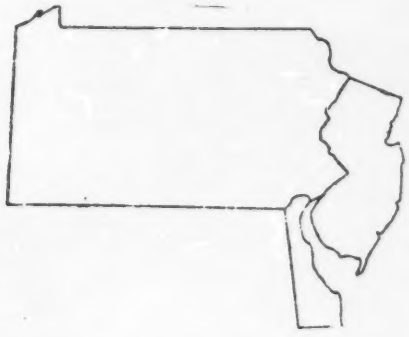
ED193200

TIME LEADER'S GUIDE

INFORMATION COLLECTION



Basic Skills Instructional Improvement Program



U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

SP 016 799

September, 1980

Developed and Produced in Collaboration with Educators
in Delaware, New Jersey, and Pennsylvania by

Basic Skills Component
Research for Better Schools, Inc.
444 North Third Street
Philadelphia, Pennsylvania 19123

The project presented or reported herein was performed pursuant to a grant from the National Institute of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the National Institute of Education, and no official endorsement by the National Institute of Education should be inferred.

TABLE OF CONTENTS

	Page
INTRODUCTION	i
Points to Keep in Mind in Using This Guide	ii
Overview of Student Engaged Time Activities	iv
Suggested School Activity Chart for Time	vi
Major Events for Time	vii
Schedule of School Activities for Time	viii
SECTION 1--INFORMATION COLLECTION	
Preview	1.1
Agenda	1.4
Major Activities for Information Collection for Time	1.5
Glossary for Information Collection	1.6
Time Materials for Information Collection	1.9
Time Notes for Information Collection	1.13
A. Agenda	1.14
B. Phases of the Instructional Improvement Cycle	1.15
Topic Outline	1.15
Materials	1.16
C. Rationale for Focus on Time	1.18
Topic Outline	1.18
Materials	1.21
Notes	1.29
D. Engagement Rate Form	1.32
Topic Outline	1.32
Materials	1.39
Notes	1.61
E. Observer Training on the Engagement Rate Form	1.68
Topic Outline	1.68
Materials	1.72
Notes	1.103
F. Demonstration of Mastery on the Engagement Rate Form	1.126
Topic Outline	1.126
Materials	1.129
Notes	1.144
G. Allocated Time Log	1.166
Topic Outline	1.166
Materials	1.170
Notes	1.183
H. Scheduling	1.190
Topic Outline	1.190
Materials	1.194

Page

Forms..... 1.201
Appendices..... 1.209
A. Alternative Agendas..... 1.209
B. Supplementary Activities for Topic B..... 1.211
Topic Outline..... 1.211
Materials..... 1.217
C. Supplement to Topic C..... 1.231
Supplementary Activities for Topic C..... 1.232
Topic Outline..... 1.232
Materials..... 1.239
Research Findings on Time..... 1.245
D. Supplementary Activity for Topic D..... 1.251
E. Supplementary Activities for Topic E..... 1.254
Materials..... 1.255
Notes..... 1.283
G. Supplement to Topic G..... 1.311

3/11/80

INTRODUCTION

The Leader's Guide for Student Engaged Time is intended to be used by program participants who are leading or conducting meetings in which participants apply the instructional improvement cycle to the variable of student engaged time. It includes suggestions for activities past participants found helpful in teaching this information to prospective participants at the regional, district, and school levels. It may also be helpful to refer to these suggestions during later rounds of the instructional improvement cycle. Details and suggestions about the specific role of each level (e.g., regional, district, principal) in relationship to activities associated with this variable may be found in the appropriate section of the Leader's Guides for each level.

Information about the general organization of this guide is included in the Leader's Guide for Orientation. The following pages provide introductory information about the Leader's Guide for Student Engaged Time including specific information about the contents of this guide, an overview of the suggested activities for student engaged time, and glossaries of the terms used in each section of the guide.

The introduction is followed by four sections which give detailed suggestions for the topics and activities associated with applying the instructional improvement cycle to student engaged time.

Section 1--Information Collection
Section 2--Comparison and Identification
Section 3--Selection and Preparation
Section 4--Implementation and Recycling

Each of these four sections is organized as described in the Leader's Guide for Orientation, and includes general information:

Preview--a brief overview of the section

Purpose--major goal of the activities in the section

Objectives--specific objectives to be accomplished

Expected Outcomes--probable outcomes of the suggested activities

Time--estimated amount of time needed to complete activities

Materials--lists of handouts, transparencies, and videotapes used in the section

Follow-up--activities that participants have found necessary or useful in achieving the objectives or in preparing for the next section

Agenda--listing and brief description of topics

Specific information for each topic is also included:

Topic Outline--main topics to be covered

Rationale--reason for including the topic and estimate of time needed to cover it

Strategies--suggestions for presenting the topic

Materials--list of pertinent handouts, transparencies, and videotapes

Alternative Strategies--suggestions for ways to adapt to particular situations

The rationale, materials, strategy, and alternative strategy descriptions are enclosed within a frame. Following that frame, the topic outline continues, presenting the major points to be discussed and indicating relevant materials.

Materials--master copies of the handouts and transparencies and descriptions of the videotape segments used

Notes--background information for the leader coded to correspond to the topic outline and indicated there by a dagger (†)

Appendices containing supplementary or alternative activities or information are included at the end of each of the four sections of this guide and are keyed to the major topics of that section. Not all topics have appendices, so the appendix letters will not necessarily form a complete alphabetic series (e.g., Section 1 has appendices A-E and G).

Points to Keep in Mind in Using This Guide

Preview

Since the length of meetings may vary from one place to another, the approximate amount of time needed for each major topic in the section is noted; in general, a break between meetings may correspond to the break between any two major topics.

In the topic outline, activities or topics which are central to the program for all participants and should not be omitted are marked with a star (★) in the margin. Those activities which must be completed only by observers are marked with a circle star (⍟). Activities which should be completed in training leaders (in addition to ★ and ⍟ activities) are marked with a circled L (Ⓛ).

Materials

All materials are coded in numerical sequence in the order presented in the topic outline. This sequence begins again with "1" for each section. Handouts are identified with an "H" in the middle of the identification code at the top of the page. Transparencies are identified with a "T." Transparencies may be used as handouts if desired. Videotapes are identified with a "V." The first numeral in the code indicates the section; the last numeral indicates the sequence in which materials are used. Thus 3H4 is a handout used in the third section of the guide as the fourth audio-visual aid. Letters (e.g., a-c) indicate the number of pages in a handout or transparency or the number of clips in a videotape. At the beginning of each section is a complete list of all the materials used.

Materials in the appendices are coded by a letter indicating the appendix, a letter indicating the type of material (H, T, or V), and a numeral indicating the sequence. For example, BT4 is a transparency in Appendix B and is used fourth. The section for materials in the appendices can be identified by the page number (e.g., page 1.250 is in Section 1).

Key pages are forms that, when completed, include information that teachers should keep for future reference. These pages are indicated by a key man (shown at right) in the upper right corner. Leaders may wish to print these pages in a special color to stress their importance.

Checkpoints (✓) used to demonstrate mastery of concepts and skills are listed as handouts in the preview, and a list of the answer keys for those checkpoints is included. Participants have found the checkpoints to be helpful in getting ready for the activities which follow; the checkpoints are to be used as a "self-check" by each person. Since individuals will probably master each skill or concept at different rates, leaders may want to plan for accommodating these individual differences (perhaps by working with small groups or by having someone who has demonstrated mastery help someone who has not).

Answer keys for the checkpoints should be removed from the guide when a new leader is being trained and replaced only after the leader has completed the checkpoint.

Multiple copies of some observation instruments will be needed in completing activities for Information Collection (Section 1). Masters for those forms to be reproduced in quantity are included at the end of that section.

The videotapes are extremely important in Section 1 for student engaged time, since they are used not only to train classroom observers but also to ensure the reliability and validity of the collected information. Two 60-minute and one 30-minute 3/4-inch (U-matic) or 1/2-inch (VHS format) cassette tapes are required and another 60-minute tape may be used; these may be borrowed from Research for Better Schools, Inc. A 3/4-inch or 1/2-inch videotape cassette machine (preferably with a "still-frame" feature) is needed to use the tapes. If you wish to have your own copy of the tapes, Research for Better Schools, Inc. will provide a 3/4-inch or 1/2-inch cassette of the tapes at no cost if a blank cassette tape is sent to them. Duplicates can also be made for 1/2-inch reel-to-reel equipment. If you have access to another kind of machine, you will need to make arrangements to copy tapes from someone with 3/4-inch or 1/2-inch equipment.

Overview of Student Engaged Time Activities

Participants have found that meetings over a period of slightly less than one semester (14-16 weeks) are needed in which to learn about and carry out the first cycle of the activities associated with applying the instructional improvement cycle to student engaged time at the school level. During this semester, the program participants attend approximately five three-hour meetings or workshops at intervals of one to five weeks. After this initial learning cycle, less time will be needed to complete each round of activities.

The Suggested School Activity Chart for Time (page vi) presents one possible model time schedule for the process. The first three three-hour meetings are spent in completing the activities for Section 1, "Information Collection." Two major events are completed: explaining the time variable in general terms and learning information collection procedures. A flexible time period of about four weeks then follows in which the third major event is completed--classroom observations are done. A three-hour meeting is held in Week No. 8 in which the activities for Section 2, "Comparison and Identification," and a fourth major event are completed. The next meeting, held the following week, is used to complete the activities for Section 3, "Selection and Preparation," and to plan for implementation and monitoring, thus completing two more major events. The selected strategies are implemented and monitored over the next two weeks which completes major event #7. The eighth major event is completed during the last meeting of the semester where activities in Section 4, "Implementation and Recycling" take place. The last four weeks of the semester are used to begin another cycle by collecting information again which completes major event #9.

The Suggested School Activity Chart presents only one alternative for scheduling student engaged time activities. It is possible to organize the meetings in many other ways--as full-day workshops, as one- or two-hour meetings, or as meetings of varying lengths. Participants have found the Schedule for School Activities for Time (page viii), as well as the times shown in the preview part of each section, of help in structuring and scheduling meetings.

Major activities are shown at the beginning of each section. The final goal or task of each section is shown at the top of the page, with prerequisite activities and/or topics described below it. Participants have found these diagrams helpful in presenting an overview of each phase for planning purposes or as an advance organizer in meetings (instead of or in addition to the agenda).

7/29/80

SUGGESTED SCHOOL ACTIVITY CHART FOR TIME

ACTIVITY \ WEEK NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
INFORMATION COLLECTION																
Introduction	E1 ●															
Instruments and procedures		●	E2													
Observer training (optional)			●													
Collecting information				◇—◆—◇—◆—◇—◆—◇—◆				E3								
COMPARISON AND IDENTIFICATION																
Comparing																
Identifying																
Making decisions								E4 ●								
SELECTION AND PREPARATION																
Classroom description									E5							
Strategy selection									E6							
Implementation plan									●							
Monitoring plan																
IMPLEMENTATION										◇—◆—◇—◆	E7					
RECYCLING																E9
Collecting information												E8	◇—◆—◇—◆—◇—◆—◇—◆			
Comparing												●				
Planning for reassessment																

VI

Key

E Completed major event as shown on next page.

● Meeting (3 hours)--Preceded by 3-hour planning session and 1-day technical training session for leaders.

◇—◆—◇ Flexible time periods required by nature of the task--observation time required is at least 15 minutes for each classroom for each subject area for each day of observation.

7/16/80

MAJOR EVENTS FOR TIME

The following list indicates major tasks to be completed in each school.

E1. Student engaged time is explained in general terms.

E2. Information collection procedures are learned--observers are trained, if necessary.

E3. Information is collected.

E4. Classroom information is compared to reference graphs and opportunities for improvement are identified; decisions about the identified opportunities are made.

E5. Strategy is selected.

E6. Implementation and monitoring plans are made, if needed.

E7. Strategy is implemented and monitored.

E8. Implementation is discussed, and plans are made for recycling.

E9. Information is again collected on student engaged time.

Continue repeating E4 - E9.

7/29/80

SCHEDULE OF SCHOOL ACTIVITIES FOR TIME

	TIME NEEDED	FORMAT	DATE(S)
INFORMATION COLLECTION			
E1. The variable is explained in general terms.	½-1 hr.	Meeting	
E2. Information collection procedures are learned.	3-4 hrs.	Meeting	
Classroom observers are trained and demonstrate mastery.	2-5 hrs.	Meeting	
E3. Information is collected.	15 mins. for each classroom for each subject area for each day	Independent	
COMPARISON AND IDENTIFICATION			
E4. Classroom information is compared to reference graphs, and opportunities for improvement are identified; decisions about the direction and amount of change are made.	2-3 hrs.	Meeting	
SELECTION AND PREPARATION			
E5. Strategy is selected.	2 hrs.	Meeting	
E6. Implementation and monitoring plans are made, if needed.	1-1½ hrs.	Meeting	
IMPLEMENTATION			
E7. Strategy is implemented and monitored.	—	Independent	
E8. Implementation is discussed, and plans are made for recycling.	1-1½ hrs.	Meeting	
RECYCLING			
E9. Information is again collected on student engaged time.	15 mins. for each classroom for each subject area for each day	Independent	

SECTION 1--INFORMATION COLLECTION

PREVIEW

Purpose:

To introduce procedures for information collection on time, to train classroom observers, and to collect information on allocated time and engagement rate in classrooms.

Objectives:

To provide an overview of the instructional improvement cycle as it pertains to time.

To provide a rationale for focusing on time, particularly student engaged time; to provide definitions for terms: school year, attendance year, school day, allocated time, engagement rate, student engaged time, and academic learning time; and to provide background on process-product research findings on time.

To teach participants to collect information on allocated time.

To teach participants to distinguish engaged from unengaged behaviors and to collect information on engagement rates.

To ascertain participants' mastery of the Allocated Time Log and Engagement Rate Form.

To schedule classroom observations.

To complete data collection on student engaged time in each classroom.

Expected Outcomes:

Demonstration of mastery of Allocated Time Log by all participants; demonstration of mastery of Engagement Rate Form by observers; schedule for initial classroom observations; collected classroom information on allocated time and engagement rate.

Time:

About 5½-9 hours of meeting time is suggested to complete an in-depth presentation, including the training of observers and demonstration of mastery on the Engagement Rate Form. Classroom observations should be made after completing Topic H (Scheduling). This time is allocated by topics as follows:

A. Agenda (5 minutes)
B. Phases of instructional improvement cycle (3 minutes)
C. Rationale for focus on time (15-25 minutes)
D. Engagement Rate Form (100-110 minutes)
E. Observer training on the Engagement Rate Form (60-180 minutes)
F. Demonstration of mastery of the Engagement Rate Form (60-120 minutes)
G. Allocated Time Log (55-60 minutes)
H. Scheduling (40 minutes)

The time needed to complete the minimal activities for nonobservers (★) is about 2½-3½ hours. Minimal activities for observers (⊕) take about 4½-8½ hours, and minimal activities for leaders take about 5-9 hours.

Supplementary activities for some topics are included in the appendices. Approximate times for these are:

B. Phases of the instructional improvement cycle (30 minutes)
C. Rationale for focus on time (60 minutes)
D. Engagement Rate Form (10-15 minutes)
E. Observer training on the Engagement Rate Form (30-120 minutes)
G. Allocated Time Log (15-20 minutes)

Materials:

Agenda

Major Activities Chart

Handouts: BH10, CH12-CH15, 1H17, 1H19, 1H21-1H23, 1H25, DH27, 1H29, 1H31, 1H35, 1H38, 1H40, √1H42, 1H44-1H46

Transparencies: 1T1, BT2-BT4, BT6-BT9, CT11, 1T16, 1T18, 1T20, DT28, 1T30, 1T34, 1T39, 1T41, 1T47

Answer Keys for Checkpoints: 1T37, 1T43

Videotapes: D. Engagement Rate Form--BV5, 1V24, 1V26
E. Observer Training--1V32, 1V33
F. Mastery--1V36

Engagement Rate Forms (10-17 per participant)

Allocated Time Logs (4-5 per participant)

Calculators

Overhead projector and screen

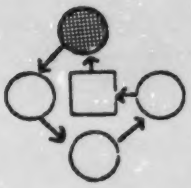
3/4" (U-matic) or 1/2" (VHS format) videotape cassette machine and television (preferably with "still-frame" feature)

Follow-up:

Complete information collection in classrooms.

Make arrangements for the Comparison and Identification meeting. Before this meeting, participants may wish to review standardized achievement test results, noting areas in which performance is relatively low.

7/16/80



INFORMATION COLLECTION FOR STUDENT ENGAGED TIME

AGENDA

A. REVIEW OF AGENDA

B. INSTRUCTIONAL IMPROVEMENT CYCLE

- Phases introduced as they relate to student engaged time

C. RATIONALE FOR FOCUS ON TIME

- Definitions of important terms used in research literature
- Selected findings from studies on time
- School, district, regional, and state influences on time

D. ENGAGEMENT RATE FORM

- Definitions of engaged and unengaged time
- Practice in identifying engaged and unengaged students

E. OBSERVER TRAINING

- Guided practice in completing Engagement Rate Forms for videotaped classrooms
- Independent practice in completing an Engagement Rate Form for a videotaped classroom

F. DEMONSTRATION OF MASTERY

- Demonstration of mastery of Engagement Rate Form

G. ALLOCATED TIME LOG

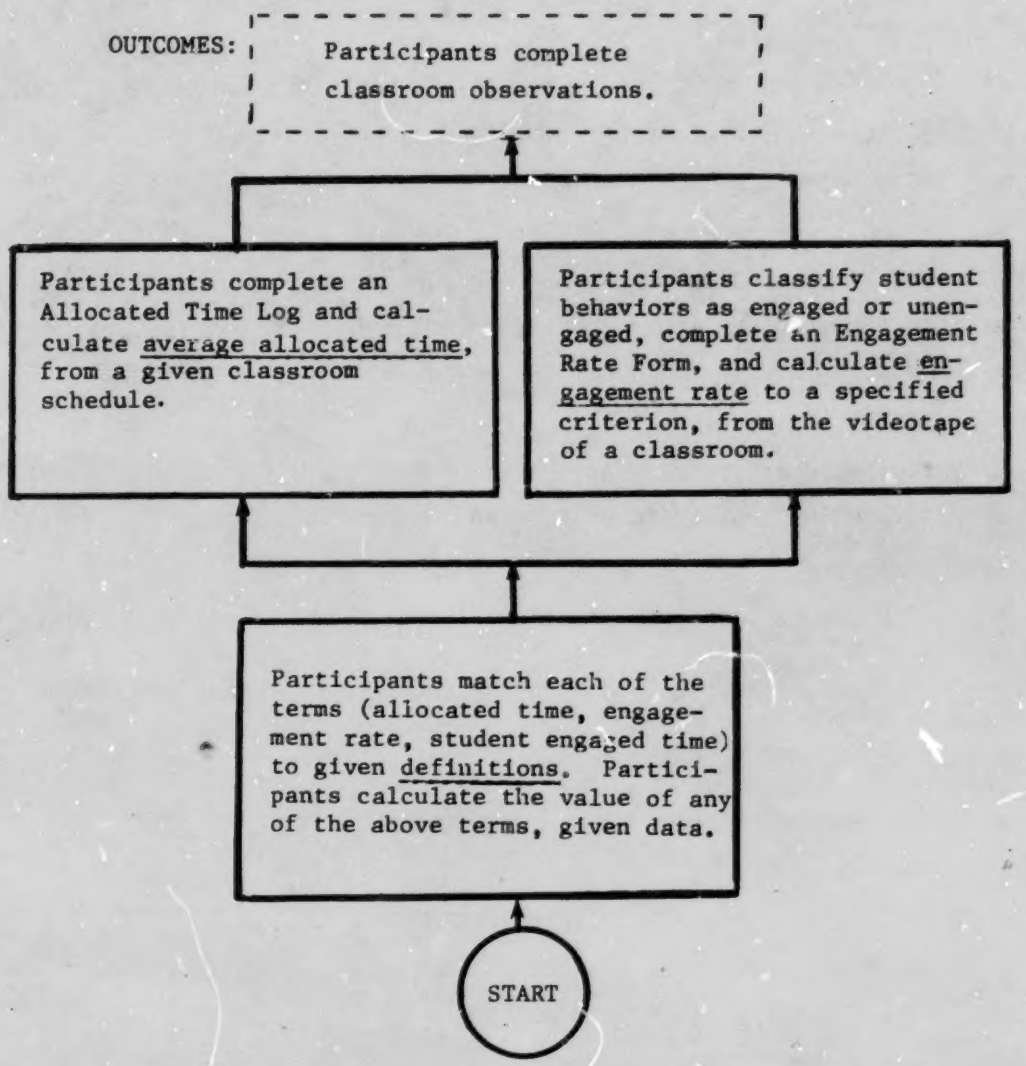
- Overview and example of Allocated Time Log
- Practice in completing Allocated Time Logs
- Demonstration of mastery of Allocated Time Log

H. SCHEDULING CLASSROOM OBSERVATIONS

Classroom observations should be completed before the next meeting.

7/16/80

MAJOR ACTIVITIES FOR INFORMATION COLLECTION FOR TIME


OUTCOMES:
Participants complete classroom observations.
Participants complete an Allocated Time Log and calculate average allocated time, from a given classroom schedule.
Participants classify student behaviors as engaged or unengaged, complete an Engagement Rate Form, and calculate engagement rate to a specified criterion, from the videotape of a classroom.
Participants match each of the terms (allocated time, engagement rate, student engaged time) to given definitions. Participants calculate the value of any of the above terms, given data.
START

Student Engaged Time = Allocated Time x Engagement Rate

Glossary for Information Collection

Academic Learning Time	Amount of time a student spends attending to academic tasks while performing with a high rate of success.
Allocated Time	Time teachers set aside for instruction in a subject area.
Allocated Time Log	Instrument used to record information about allocated time.
Attendance Year	Number of days in year a student actually attends school.
Checkpoint	Activities which participants use to demonstrate mastery of specific concepts or skills.
Discipline	One of the unengaged categories on the Engagement Rate Form. This may be used when an adult is reprimanding a student, when a student is being punished, or when a student is watching another student being punished.
Engaged	Doing academic work in math or reading/language arts.
Engaged Categories	Math or reading/language arts categories used to code students doing academic work on the Engagement Rate Form.
Engagement Rate	Percent of allocated time that a class is perceived to be actively working, or engaged in, learning or percent of students engaged in instruction at any given moment of a class.
Engagement Rate Form	Observation instrument used to record information about the engaged and unengaged behaviors of students.
Management/Transition	One of the unengaged categories on the Engagement Rate Form. This is used when students are involved in daily, routine classroom activities or preparatory or "inbetween" activities.

Other Assigned	Category used to code student behaviors on the Engagement Rate Form. This is used when students are assigned to subjects other than math or reading/language arts.
Out of Room	Unengaged category on Engagement Rate Form used when students are temporarily out of the room.
Part of Period	Beginning, middle, or end. This information is recorded on the Engagement Rate Form.
Pre-Observation Form	Instrument used to describe classroom activities for the observer.
Process-Product Research	Research investigating the relationships between teacher and student behaviors (processes) and student achievement (products).
Pullout Assigned	Category used to code student behaviors on the Engagement Rate Form. Pullouts occur when students are regularly assigned out of the classroom.
School Day	Number of hours per day students are in school.
School Year	Number of days scheduled for student attendance in a year.
Socializing	Unengaged category on Engagement Rate Form used when two or more persons are interacting socially.
Student Engaged Time	Amount of time a student is actively engaged in attending to academic instruction or tasks. Student engaged time is equal to allocated time multiplied by engagement rate.

Time Nomograph	Computational tool used to calculate student engaged time.
Unengaged	Not doing or attending to assigned academic work.
Unengaged Categories	Categories used to code unengaged student behaviors as relating to management/transition, discipline, socializing, unoccupied/observing, or out of room on Engagement Rate Form.
Unoccupied/Observing	Unengaged category used to code student behavior on Engagement Rate Form. This category is used when a student is sitting or standing alone, wandering about with no evident purpose or goal, watching other people or unassigned activities, or playing with materials.

Time Materials for Information Collection

The following materials are used in information collection for student engaged time. Three videotapes are used; one (Topic D) contains B1V5, 1V24, and 1V26; another (Topic E) includes 1V32 and 1V33; while the third (Topic F) includes 1V36.

Topic B--Phases of the instructional improvement cycle

★1T1 Instructional Improvement Cycle

Appendix B

BT2 Blank Allocated Time Log

BT3 Completed Allocated Time Log

BT4 (a-b) Blank Engagement Rate Form

BV5 Classroom Scan for Engagement Rate Form

BT6 (a-b) Completed Engagement Rate Form

BT7 Completed Time Nomograph

BT8 Third Grade Reading and Language Total Graph

BT9 Types of Graphs

BH10 (a-b) Selected Program Modifications

Topic C--Rationale for focus on time

Ⓛ1T16 Flow Chart for Computing Student Engaged Time

★1H17 Time Definitions Worksheet

★1T18 Answer Key for 1H17

Ⓛ1H19 Student Engaged Time Worksheet

Ⓛ1T20 Answer Key for 1H19

★1H21 (a-b) Time Glossary; Selected References

★--Minimal activity for all participants
Ⓛ--Minimal activity for leaders only

Appendix C

CT11 Measures of Time

CH12 Estimate Your Time

CH13 Time Nomograph

CH14 Engagement Rate and Productive Time (Worksheet)

CH15 Calculating Student Engaged Time (Worksheet)

Topic D--Engagement Rate Form

★1H22 (a-b) Definitions of Categories for Engagement Rate Form

★1H23 Descriptions of Engaged Behaviors

★1V24 (a-c) Examples of Engaged Behaviors

★1H25 Descriptions of Unengaged Behaviors

★1V26 (a-c) Examples of Unengaged Behaviors

★1H29 (a-h) Classroom Pictures

★1T30 (a-g) Answer Key for Classroom Pictures

Appendix D

DH27 Chart of Engaged and Unengaged Behaviors (Worksheet)

DT28 Answer Key for Chart

Topic E--Observer training on the Engagement Rate Form

1H31 (a-q) Blank Classroom Diagrams

✪1V32 (a-c) Discrimination of Engaged and Unengaged Behaviors

✪1V33 Independent Practice in Observation

✪1T34 (a-h) Answer Keys for 1V32 and 1V33

★--Minimal activity for all participants
✪--Minimal activity for observers and leaders

Appendix E

EH31 (a-o) Blank Classroom Diagrams

EV32 (d-i) Supplementary Tape

ET34 (a-1) Answer Keys for EV32

Topic F--Demonstration of Mastery of the Engagement Rate Form

✪√1H35 (a-g) Engagement Rate Form

✪ 1V36 (a-c) Demonstration of Mastery on the Engagement Rate Form

✪ 1T37 (a-f) Answer Key for √1H35

Topic G--Allocated Time Log

★ 1H38 (a-b) Sue Lee's Classroom (whole class assignments)

★ 1T39 Answer Key for 1H38

1H40 (a-b) Lisa Hadley's Classroom (parts of class assigned to different subjects)

★ 1T41 Answer Key for 1H40

★√1H42 (a-b) Allocated Time Log

★ 1T43 (a-d) Key for √1H42

Appendix G

√GH42c Erica Swenson's Classroom (whole class assignments)

GT43 (e-f) Key for √1H42c

Topic H--Scheduling

★ 1H44 Alternative Initial Observation Procedures

★ 1H45 (a-b) Observation Schedule

★ 1H46 (a-b) Pre-Observation Form

★ 1T47 Forms Used in Information Collection

★ --Minimal activity for all participants
⊛ --Minimal activity for observers and leaders

Also included are the following forms for use in training and in collecting data in classrooms:

Pre-Observation Form

Allocated Time Log

Engagement Rate Form

Alternate Engagement Rate Form

8/25/80

Time Notes for Information Collection

Topic C	
C.3.d.	Student Engaged Time--Follow Through Classroom Observation Evaluation
Topic D	
D.1.b.	The Validity of Using Teachers as Instructional Time Data Collectors
D.1.c.	Student Engaged Time: A Comparison of Data Collection Procedures
D.6.a.(1).(h).	Explanation of Number of Students Present Row on the Engagement Rate Form
D.7.	Engagement Rate Form
Topic E	
E.1.	Videotape of Three Classrooms
E.2.	Independent Practice Videotape
Topic F	
F.6.	Demonstration of Mastery on the Engagement Rate Form
Topic G	
G.1.c.	Allocated Time Log
G.2.	Example of Sue Lee's Classroom
G.3.	Example of Lisa Hadley's Classroom

Topic Outline

★A. Agenda (5 minutes)

Rationale. There is a need to organize the meeting activities.	
Materials	Strategy
--Agenda --Major Activities Chart	Briefly discuss information listed on the agenda and entertain any questions or concerns.

1. Purpose of meeting--introduce procedures for information collection on time and train classroom observers
2. Proposed agenda
3. Expected outcomes
   a. Participants trained to collect information on alloc[illegible] time and engagement rates
   b. Schedule for initial classroom observations establishe[illegible]

★B. Phases of the instructional improvement cycle (3 minutes)

Rationale. The participants must understand the relationship between Information Collection and other phases of the instructional improvement cycle. Participants will be able to organize the details of this phase if they know how it relates to the rest of the improvement cycle.

Materials	Strategy
1T1--Instructional Improvement Cycle	Discuss the phases of the instructional improvement cycle.

Alternative Strategy

If you wish to provide more details about activities involved in applying the instructional improvement cycle, you may want to use some of the activities in Appendix B.

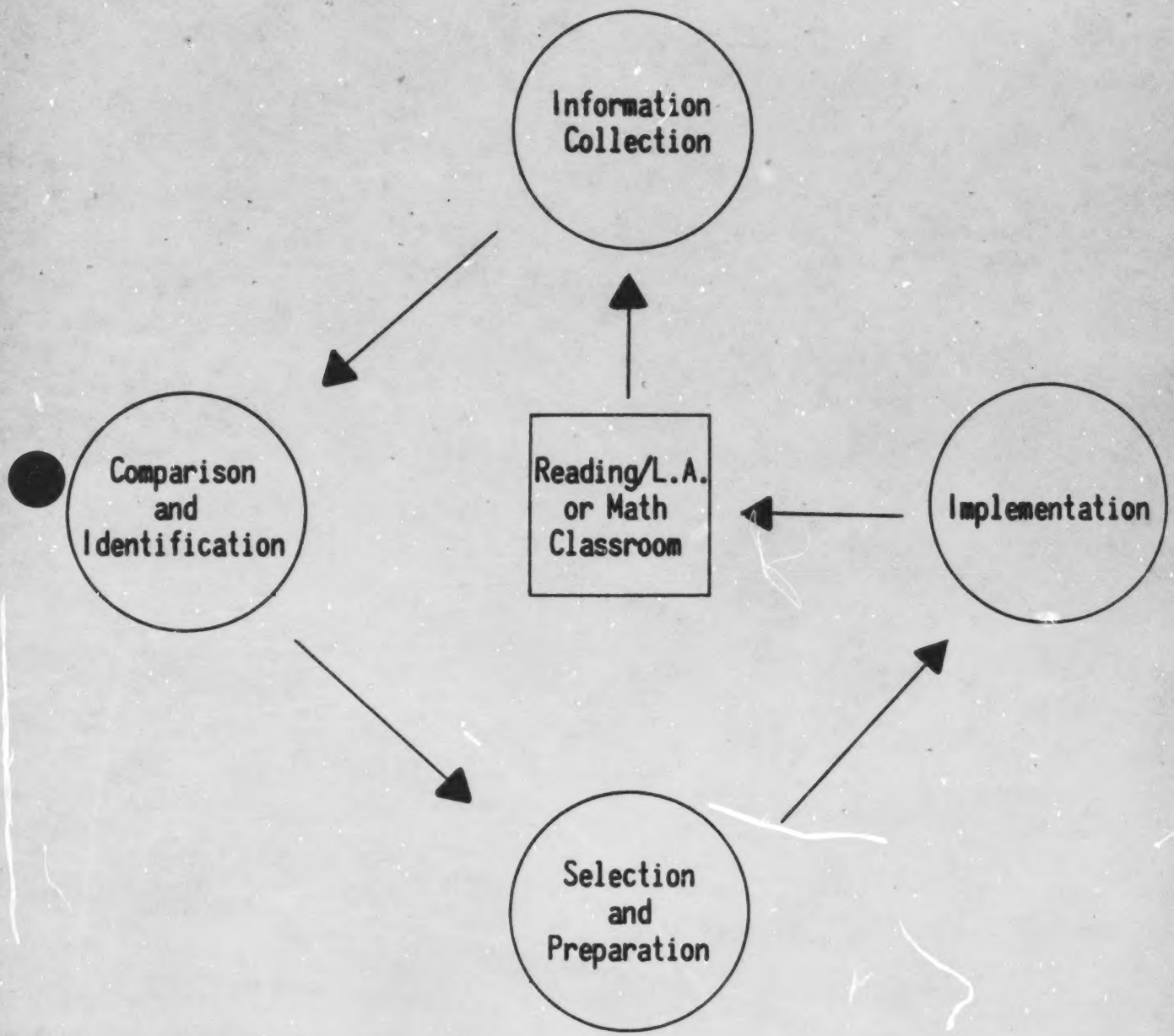
1. Phases of the instructional improvement cycle (3 minutes) (1T1)
   a. Collect information
   b. Compare collected information with research and identify desired changes
   c. Select program modification(s) and prepare implementation plan
   d. Implement and monitor modifications
   e. Repeat cycle again

Materials

The following supplementary materials are in Appendix B:

BT2	Blank Allocated Time Log
BT3	Completed Allocated Time Log
BT4 (a-b)	Blank Engagement Rate Form
BV5	Classroom Scan for Engagement Rate Form
BT6 (a-b)	Completed Engagement Rate Form
BT7	Completed Time Nomograph
BT8	Third Grade Reading and Language Total Graph
BT9	Types of Graphs
BH10 (a-b)	Selected Program Modifications

BASIC SKILLS INSTRUCTIONAL IMPROVEMENT CYCLE



C. Rationale for focus on time (15-25 minutes)

Rationale. Common sense and research studies indicate the importance of time for student achievement. Participants should understand that various measures of time have been studied in process/product and/or experimental research and that as might be expected several of these measures have been shown to be significantly related to achievement. Measures used in information collection (allocated time, engagement rate, and student engaged time) are defined and discussed.

Materials	Strategy
	Explain why time is important in determining students' opportunity to learn basic skills. Discuss how the program will help locate these opportunities.
★1H21--Time Glossary; (a-b) Selected References (L) --Research Findings on Time (Appendix C) ★1H17--Time Definitions Worksheet ★1T18--Answer Key for 1H17	Define each of the terms on 1H21. Distribute "Research Findings on Time" for background information on research findings. Have teachers complete 1H17 independently.
(L) 1T16--Flow Chart for Computing Student Engaged Time (L) 1H19--Student Engaged Time Worksheet (L) 1T20--Answer Key for 1H19 --Calculator	Show leaders how to use the flow chart and have them complete 1H19.

Alternative Strategies

1. Supplementary activities (including the oral presentation of research findings and the completion of worksheets relating to the measures defined) are included in Appendix C. Leaders may wish to use some or all of these activities.
2. See the alternate agendas in Appendix A.

★1. Time important in determining students' opportunity to learn basic skills (3 minutes)

a. Common sense--the more time you have to learn, the more can be learned

b. Many theories of instruction (Carroll, Bloom, Cooley-Lohnes) include notion of time

c. Research studies show several measures of time are significantly related to student achievement

★2. Goal of program--locate opportunities for improving instruction in basic skills (2 minutes)

a. Time shown to be an important factor in student achievement

b. Program will enable each teacher to look at time expenditures in his/her classroom

★3. Various measures of time have been studied (1H21a) (15 minutes)

a. Allocated time---time teachers set aside for instruction in a content area

(1) Amount of time scheduled or planned for instruction is one measure

(2) However, amount of time planned or scheduled is changed by spontaneous, unplanned events that cause variation in day-to-day opportunity to learn--records of when instruction actually begins and ends verify this

(3) Measured in minutes

b. Engagement rate

(1) Introduction

(a) 45 minutes of instruction in math provided

(b) Student not apt to be attending 100% of time because of talking, daydreaming, socializing, etc.

(c) Thus, another measure for rate of engagement is introduced

(2) Definition

(a) Percent of allocated time that a class is perceived to be actively working, or engaged in, learning

(b) Or, another measure of engagement rate is the percent of students engaged in instruction at any given moment of a class

(3) Measured as a rate (% of allocated time)

c. Student engaged time

(1) Amount of time a student is actively engaged in attending to academic instruction or tasks

(2) Student engaged time = allocated time x engagement rate

(3) Measured in minutes

(4) Major influences are allocated time and engagement rate

(a) If allocated time remains the same and engagement rate is increased, student engaged time increases

(b) If engagement rate remains the same and allocated time is increased, then student engaged time increases

d. Worksheet (1H17a, 1T18)

Ⓛ 4. Calculating student engaged time (10 minutes)

a. Flow chart (1T16)

(1) Find allocated time in minutes

(2) Engagement rate = $\frac{\text{\# engaged}}{\text{\# assigned}}$

(3) Student engaged time = allocated time × engagement rate

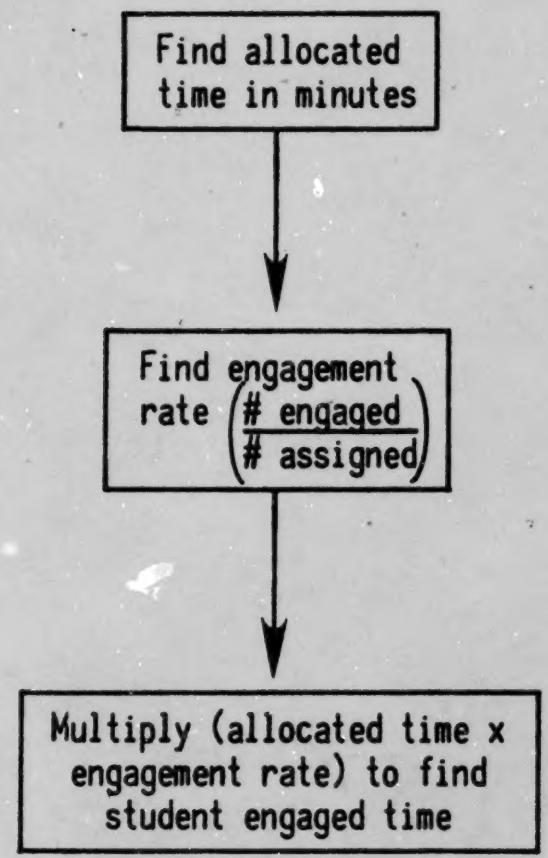
b. Worksheet (1H19, 1T20)

Materials

Included in Appendix C are the following supplementary materials:

CT11	Measures of Time
CH12	Estimate Your Time
CH13 (a-b)	Time Nomograph
CH14	Engagement Rate and Student Engaged Time (Worksheet)
CH15	Calculating Student Engaged Time (Worksheet)

Flow Chart for Computing Student Engaged Time


Find allocated time in minutes
Find engagement rate (# engaged / # assigned)
Multiply (allocated time x engagement rate) to find student engaged time

TIME DEFINITIONS WORKSHEET

1. Allocated time in math is

   a. the amount of time schools are open.
   b. the amount of time per day the teacher spends on math instruction.
   c. the amount of time per day students attend to math instruction.
   d. the amount of time per day district plans indicate should be spent on math.
   e. none of these.

2. Engagement rate is

   a. percent of assigned students who are actively participating in academic content.
   b. productive time divided by teaching day.
   c. student engaged time.
   d. (time allocated to math) divided by (time allocated to reading).
   e. none of these.

3. Student engaged time in reading is

   a. (number of students attending to math instruction) divided by (number of students not attending to reading instruction).
   b. the amount of time devoted to reading by the teacher.
   c. the amount of time a student spends reading.
   d. the amount of time a student is actively participating in reading instruction.
   e. none of these.

ANSWER KEY FOR 1H17

1. b

2. a

3. d

★★★FACT SHEET★★★

$$\text{Engagement rate} = \frac{\text{total number of students engaged}}{\text{total number of students assigned}}$$

Student engaged time = engagement rate x allocated time

7/15/80

STUDENT ENGAGED TIME WORKSHEET

Erica Swenson observed Jerry Sato's first grade class on April 15th. The class was divided into reading groups. Between 9 and 10:20, three reading groups met with Jerry. When not in a reading group the students did reading workbook pages, or listened to and read along with a story tape. Find each aspect of time indicated below. You may want to use a calculator or the nomograph.

Time	9:15	9:16	9:17	9:18	9:19	9:20	9:21	9:22	9:23	9:24	9:25	9:26	9:27	9:28	9:29	TOTAL
# unengaged students	4	1	2	3	2	1	9	15	15	2	1	1	3	4	5	68
# engaged students	20	23	22	21	22	23	15	9	9	22	23	23	20	21	19	292
# assigned students	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	360

a) Allocated Time = _____ b) Engagement Rate = _____ c) Student Engaged Time = _____

1.25

1H19

ANSWER KEY FOR 1H19

a. 80 minutes

b. 81%

c. 65 minutes

TIME GLOSSARY

ALLOCATED TIME--amount of time teacher spends on instruction in a subject area

ENGAGEMENT RATE--percent of students actively working, or engaged, in a subject area

STUDENT ENGAGED TIME--amount of time students are actively engaged in a subject area

STUDENT ENGAGED TIME = ALLOCATED TIME x ENGAGEMENT RATE

3/20/80

SELECTED REFERENCES

Berliner, D. C. Tempus educare. In P. L. Peterson & H. J. Walberg (Eds.), Research on teaching: Concepts, findings, and implications. Berkeley, Calif.: McCutchan Publishing Corporation, 1979.

O'Donnell, H. Instructional time as related to reading achievement. The Reading Teacher, November 1978, 246-251.

Rosenshine, B. V. Classroom instruction. In N. L. Gage (Ed.), The psychology of teaching methods. Chicago, Ill.: National Society for the Study of Education, 1976, 335-337 (esp. 342-348).

Rosenshine, B. V. Content, time, and direct instruction. In P. L. Peterson & H. J. Walberg (Eds.), Research on teaching. Berkeley, Calif.: McCutchan Publishing Corporation, 1979, 28-55 (esp. 33-38).

NOTES

C.3.d. Student Engaged Time--Follow Through Classroom Observation Evaluation

The concept of student time, the research on student engaged time, and the data used for comparison purposes in Phase Two of the improvement approach are derived from the Stallings and Kaskowitz Follow Through Classroom Observation Evaluation: 1972-1973 (1974).

The Follow Through Evaluation Studies focused on the impact and effectiveness of the Follow Through programs of various sponsors (Far West Laboratory's Responsive Education Program, the University of Arizona's Tucson Early Education Model, The Bank Street College Education Approach, The University of Oregon Engelmann-Becker Model, The University of Kansas Behavior Analysis Approach, High/Scope Educational Research Foundation's Cognitively Oriented Curriculum Model, and The Educational Development Center's EDC Open Education Follow Through Model). Another intent of the studies was to compare the effectiveness of the overall Follow Through classroom program with the approach of non-Follow Through classrooms.

One of the major purposes of the Follow Through Classroom Observation Studies was to relate some 600 classroom conditions/process variables to student outcome measures (e.g., student achievement in basic skills, in reasoning, in self-esteem, etc.).

Observation data were collected during the 1972-1973 school year from 36 sites. Data from 108 first grade classrooms and 58 third grade classrooms, both Follow Through and non-Follow Through classrooms, were used. (Readers may recall that the Follow Through program was designed to meet the needs of children from low-income families. A principal objective of the program was to sustain and supplement in the early grades the gains made by children who had a full year's experience in a Head Start or comparable preschool program. These criteria generally determined which children participated in the Follow Through Program in an individual site. Note, however, that within individual sites, and across sites nationally, differences exist in basic child characteristics such as entering ability, preschool experience and language spoken in the home.) Non-Follow Through classrooms were selected so that they formed a comparable group of students. The sites ranged in location from rural areas to large metropolitan areas. All geographical sections of the country were represented. The ethnic composition of classrooms varied from no black children to 100% black children. Fifteen sites had children who spoke English as a second language. Children entered first grade with differing abilities. Class sizes ranged from 15 to 37.

Classrooms were observed by trained observers on three consecutive days during the 1972-1973 school year. A Classroom Observation Instrument facilitated the coding of information for about 600 classroom

C.3.d.--Continued

variables; student engaged time was derived from one of these.

During first grade, pretest achievement data in reading/language arts and mathematics were collected for all students in the fall on the Wide Range Achievement Test (WRAT). The WRAT--highly correlated with the Metropolitan Achievement Test (MAT)--was used for baseline data because it was the only test that was administered consistently during the first three years of Follow Through. The 1965 version of the test was used, and scores in reading, spelling, and arithmetic were obtained for entering first graders.

In the spring of 1973, posttest data were collected on the Metropolitan Achievement Test (MAT) c.1970, Form F. For first grade, the Primary I Form scores used were Word Analysis, Total Reading, and Mathematics. For third grade, the elementary test scores of Total Reading, Language, Math Computation, Math Concepts, Math Problem Solving, and Total Math were used.

In summary, achievement data used to compute achievement gains were as follows:

	1st grades	3rd grades
Pretest - WRAT	Fall 1972	Fall 1970
Posttest MAT	Spring 1973	Spring 1973

D. Engagement Rate Form (100-110 minutes)

Rationale. Participants need to know definitions of engaged and unengaged behaviors. Teachers who will not be observing need to understand how information will be collected in their classrooms.

Materials	Strategy
★BV5--Classroom Scan for Engagement Rate	Discuss rationale for systematic observation and standard definitions. If BV5 was not shown earlier, view it now to illustrate how a classroom is scanned when observing.
★1H22--Definitions of (a-b) Categories for Engagement Rate Form ★1H23--Descriptions of Engaged Behaviors ★1V24--Examples of (a-c) Engaged Behaviors ★1H25--Descriptions of Unengaged Behaviors ★1V26--Examples of (a-c) Unengaged Behaviors	Present definitions for engaged and unengaged behaviors. Read and discuss examples of engaged behaviors on 1H23 and elicit additional examples. View each classroom on videotape (1V24), having participants keep a mental or written record of appropriate student descriptions. After each classroom is viewed on the videotape, stop the tape and list the engaged behaviors observed in that classroom. Then view the list on the tape and compare it with your list. If descriptions are missing on your list, repeat the tape to find these examples. Repeat these procedures for the unengaged behavior handout and videotape (1V26).
★1H29--Classroom (a-h) Pictures	Describe the classroom that will be coded by discussing the Pre-Observation Form. Then have participants decide whether each student in each picture is engaged or unengaged and label him/her with one of the categories indicated on 1H29a. Complete the first picture as a group, discussing the coding of each student's behavior. Indicate to participants that some students are assigned to reading in the next four pictures and that these students must be marked with Ar as well as a code. Have participants complete

Engagement Rate Form--Continued

Materials	Strategy
	the pictures for 1:24 and 1:26. Explain that the last two pictures also include students who are pullouts or assigned to other subject areas; these students should be coded with Ao or Po, respectively. Have participants complete the remaining pictures and check their answers. You may want to ask that the total number of students in each category be recorded at the bottom of each page.
--Engagement Rate Form ★1T30--Answer Key for (a-g) Classroom Pictures --Engagement Rate Form	Describe each part of the Engagement Rate Form and then complete it for the classroom pictures. See Note D.7. for a detailed description of this activity. Check answers as indicated on the note. If there is a disagreement over the number of unengaged students, show 1T30 to locate students coded incorrectly. Then calculate the engagement rates for each subject.

Alternative Strategies

1. When viewing videotape examples of engaged and unengaged behaviors (1V24 and 1V26), stop and discuss individual descriptions. Check with descriptions at the end of each clip.
2. Additional practice in identifying engaged and unengaged behaviors may be obtained by completing the supplementary activity in Appendix D.

★1. Observation (5 minutes)

a. Appropriate for collecting information on engagement rate

†b. Observer usually another teacher or an administrator - since difficult to observe while teaching

c. Need for systematic observation and standard definitions

(1) Similarity between way data are collected in classroom and in research base

(2) Similarity between observers collecting data

(3) Assumption--participants already have definitions of engaged and unengaged; purpose of training is to refine those so that they correspond to research definitions

d. Steps in process of observing

(1) Look at each student

(2) Describe student's behavior in objective, nonevaluative manner

(3) Match description with definitions and examples provided

(4) Classify as either engaged or one of five categories of unengaged

(5) Tally on Engagement Rate Form

e. Classroom situations during which observations may be made (BV5)

(1) Camera scans middle of sixth grade reading/language arts class student by student to determine number of unengaged students

(2) Classroom is scanned each time in the same pattern in order not to skip any students

★2. Definitions of engaged and unengaged behaviors (1H22) (10 minutes)

a. Source - Stallings & Kaskowitz Follow Through Study (see Appendix C)

b. Student behaviors during reading/language arts or math instruction

(1) Engaged - doing academic work

(2) Unengaged - not doing or attending to assigned academic work

(a) Management/transition

(b) Socializing

(c) Discipline

(d) Unoccupied/observing

(e) Out of room

3. Examples of engaged behaviors (25 minutes)

★a. Relationship of teacher providing instruction with student engaged behaviors (1H23)

(1) Presenting academic information or directions

(2) Asking academic question

(3) Giving test

(4) Listening to student's academic response

(5) Reading to students

★b. Engaged student behaviors (1H23)

(1) Reading academic information

(2) Writing, drawing, or erasing academic information

(3) Speaking related to content area

(4) Listening to teacher or student present academic information

(5) Watching teacher or another student working on academic content

(6) Manipulating academic materials in an appropriate way

(7) If appropriate description of student includes both engaged and unengaged behaviors at the same time, code as engaged (e.g., looking around the room and writing)

c. Engaged student behaviors in classrooms (1V24) (15 minutes)

★(1) Classroom #A

(a) Middle of 3rd grade math--discussion of odd and even numbers; students have workbooks open

(b) Appropriate descriptions of engaged behaviors

(i) Raising hand in response to teacher's question

(ii) Looking at appropriate page in book

(iii) Answering teacher's math question

(iv) Listening to teacher (or student) talk about math

(v) Writing math content on board

(vi) Watching student write math content on board

(2) Classroom #B

(a) Middle of 4th grade reading with students doing seat-work; vocabulary words written on board

(b) Additional appropriate descriptions of engaged behaviors

(i) Writing in workbook

(ii) Reading vocabulary words on board

(iii) Talking to teacher about reading

(3) Classroom #C

(a) Middle of 1st grade math--teacher-led total class exercise on money

(b) Additional appropriate descriptions of engaged behaviors

(i) Appropriate use of manipulative math materials

4. Examples of unengaged behaviors (25 minutes)

★a. Relationship of teacher activities with student unengaged behaviors (1H25)

(1) Managing class and transition activities

(a) Giving nonacademic directions

(b) Giving answers without any explanation

(2) Social conversation with student

(3) Disciplining student

★b. Unengaged student behaviors (1H25)

(1) Management/transition activities

(2) Socializing

(3) Being disciplined

(4) Unoccupied/observing--used if students can not be classified in any other subcategory

(5) Out of room

c. Unengaged student behaviors in classrooms (1V26) (15 minutes)

★(1) Classroom #A

(a) Middle of 3rd grade math--seatwork with teacher at desk with individual student

(b) Appropriate descriptions of unengaged behaviors

(i) Reading bulletin boards while waiting for help from teacher (M)

(ii) Looking out the door (U)

(iii) Talking to neighbor (S)

(2) Classroom #B

(a) Middle of 4th grade reading--teacher-led discussion of definitions of vocabulary words

(b) Additional appropriate descriptions of unengaged behaviors

(i) Being disciplined (D)

(ii) Watching other students being disciplined (D)

★(3) Classroom #C

(a) Middle of 1st grade math--transition to new activity

(b) Additional appropriate descriptions of unengaged behaviors

(i) Handing out materials (M)

(ii) Waiting for new activity to begin (M)

(iii) Listening to teacher's directions (M)

(iv) Listening to teacher's praise for following directions (M)

★5. Distinguishing between engaged and unengaged behaviors--classroom pictures (1H29) (15-20 minutes)

a. Pre-Observation Form completed by teacher being observed before observation

b. First picture, all math, 1:22

c. Next two pictures, math and reading, 1:24 and 1:26

d. Last two pictures; math, reading, pullout, and assigned other; 1:28 and 1:30

e. Last picture, one student goes home sick so number of students present changes (no code needed)

★6. Description of Engagement Rate Form (15 minutes)

a. Identification information

(1) Needed for data analysis

(a) State #

(b) District #

(c) School #

(d) Teacher #

(e) Coder #

(f) Date

(g) Grade

†(h) Number of students present

(i) Part of class observed

(2) Codes protect confidentiality of teacher

(a) Teacher keeps own code

(b) Left-hand corner with names cut off after codes entered

b. Directions at bottom of form

c. Observation times

(1) Entries show time of day and part of period covered by observation

(2) Entries indicate when observations were made (e.g., every minute or two minutes depending on length of period)

d. Assigned categories

(1) Categories - reading/language arts, math, other subjects, pullout

(2) Procedure - count students before making each classroom scan and enter number in appropriate boxes

e. Unengaged categories

(1) Categories - management/transition, socializing, discipline, unoccupied/observing, out of room

(2) Procedure

(a) Count unengaged students during observation and make tally marks under the appropriate category

(b) Add all the unengaged categories for each observation

f. Engaged categories

(1) Procedure - subtract subtotal of unengaged students from subtotal of assigned students to determine subtotal engaged for each observation

g. Totals for each subject

(1) Assigned students

(2) Unengaged students for each category

(3) Unengaged students in all categories

(4) Engaged students

h. Engagement rate for each subject - divide total engaged by total assigned

★†7. Completion of Engagement Rate Form for classroom pictures (1H29, 1T30) (5-10 minutes)

a. Observation #1

b. Observations #2-#3

c. Observations #4-#5

Materials

In addition to the materials included here, the following will be needed:

BV5	Classroom Scan for Engagement Rate	(Appendix B)
	Engagement Rate Form (1)	(Forms)

Included in Appendix D are the following supplementary materials:

DH27	Chart of Engaged and Unengaged Behaviors	(Worksheet)
DT28	Answer Key for Chart	

DEFINITIONS FOR CATEGORIES USED ON ENGAGEMENT RATE FORM

ENGAGED CATEGORIES

Mathematics

Student is involved in or attending to instruction in arithmetic, numbers, computation, measurement, geometry, word problems, or counting

Reading/Language Arts

Student is involved in or attending to instruction in oral/silent reading, decoding, comprehension, handwriting, spelling, speaking or listening activities, literature, grammar, composition

UNENGAGED CATEGORIES

Management/Transition (M)

Daily, routine classroom activities or preparatory or "in-between" activities (e.g., distributing, setting up, or gathering equipment, supplies, materials, or furniture; taking roll; cleaning up; putting on or taking off coats; standing in line; getting a drink or washing hands in room; putting headings on papers; nonacademic directions; getting ready or waiting for next activity to begin; waiting for teacher's help; turning through pages in book)

Socializing (S)

Two or more persons who are interacting socially (e.g., talking, whispering, laughing, wrestling, hitting, note passing, walking together)

Discipline (D)

Adult is reprimanding a student, a student is being punished or student is watching other student being scolded (e.g., one student is being scolded and whole class is listening, head down on desk for punishment)

Unoccupied/Observing (U)

Student is sitting or standing alone, wandering about with no evident purpose or goal, watching other people or unassigned activities, or playing with materials.

Out of Room (O)

Student temporarily out of room (e.g., bathroom, errand, nurse, office)

OTHER ASSIGNED

Student assigned to subject other than reading/language arts or math (e.g., social studies, science, art, music, free time activities, games, snack)

PULLOUT ASSIGNED

Student(s) regularly assigned out of classroom (e.g., Title I, remedial reading, instrumental music, adaptive physical education, chorus, bilingual instruction)

Additional Comments on Definitions of Engaged and Unengaged Behaviors

1. If appropriate descriptions of a student would clearly allow classification as either engaged or unengaged, classify the student as engaged.

2. Classify student as unoccupied/observing only <u>if</u> student can not be classified in one of the other unengaged categories.

3. If teacher directions do not contain content information, students listening to the teacher are coded in either the management/transition or discipline category, depending upon the context.

4. In situations where the same behavior might be described in different ways depending upon the context (e.g., talking about subject matter or socializing), make the best decision possible after looking for additional clues and then go on.

5. Students listening to corrective feedback from the teacher are coded as engaged. Corrective feedback occurs when the teacher tells the student whether his/her answer is right or wrong <u>and</u> why. A student listening to the teacher read answers without explaining them is classified in the management/transition category.

DESCRIPTIONS OF ENGAGED BEHAVIORS

TEACHER STATEMENTS

If a student was paying attention when the teacher was providing instruction in the specified content area, the student would be engaged. The following statements are examples of such teacher comments.

"Tell me how many centimeters are in the first object. How many people got 12? Well, you were all wrong. If you don't put your ruler right up next to it, boys and girls, you are going to throw your measurement off--eventually, you will end up with a few more centimeters than everyone else."

"Today, we're going to look at words that are pronounced alike but may be spelled differently and have different meanings. These words are called homophones."

"The first word on your spelling test is combination. Write combination."

"Does the first sentence of a paragraph start at the margin?"

"Stand back," said the Kangaroo. "I'm going to jump! I hate to alarm you, but I don't wish to harm you!" (Children's story)

"That's right, John. The answer is water, because the boat was in the water." (praise/corrective feedback on academic work)

"Be sure to line up your tens and ones columns in each addition problem."

ENGAGED STUDENT BEHAVIORS

Behavior	Reading/LA	Math
Silent reading	Library book Basal story Turning a page	Textbook Worksheet Workbook
Writing and Erasing	Creative writing Handwriting	Worksheet Blackboard
Speaking	Sounding out a word Oral reading Two students talking about a story	Answering teacher's academic question
Listening	Story being read Student explanation of answer to exercise	Teacher explanation of how to use a manipulative Teacher praise for good academic work
Watching	Another student responding to teacher's academic question	Teacher solution of problem on board
Drawing	A picture beginning with the letter "R"	A square
Manipulating	Scrabble letters*	Number rods*
Hand raised	Response to teacher's academic question	

* Manipulating in academic manner

1V24 consists of three videotape clips of three classrooms. During each observation scan of a classroom, participants will be focusing on engaged student behaviors.

DESCRIPTIONS OF UNENGAGED BEHAVIORS

TEACHER STATEMENTS

If a student was paying attention when the teacher was managing or disciplining the class or socializing with the students, the student would be unengaged. The following statements are examples of such teacher statements.

Management/Transition

"Today, the Pirates will do workbook pages 13 and 14 and the Phillies will do pages 25 and 26."

"The answers are 12, 36, 48, and 200."

"Group 3, come up for reading. Turn to page 81. Who would like to read nice and loud?"

"Tomorrow we will be studying measurement in math class. Who can bring in some cardboard or plastic milk or juice cartons?"

"I like the way Crystal is working quietly." (praise for behavior)

Socializing

"Did your team win last night, Ralph?"

"Marsha, that's a very pretty dress."

Disciplining

"Do you know why I'm waiting? That's right, someone is not listening."*

"If I see you out of your seat again, Sue, you will stay after school!"

"What are you supposed to be doing, Kevin?"*

"I think you two could be looking at someone else's book - not just sitting there."*

UNENGAGED STUDENT BEHAVIORS

If a student is showing the following behavior, she/he would be coded as unengaged.

Management/Transition

Rummaging in desk
Sharpening pencil
Waiting in line at teacher's desk
Waiting with hand raised for help
Writing name on paper
Turning pages in book
Watching a student involved in a management or transition activity

Socializing

Whispering nonacademic comment to neighbor
Passing notes
Watching someone whispering

Unoccupied/Observing

Staring out the window
Aimlessly wandering around classroom
Watching another student do a different assignment

Out of Room

Went to bathroom
Went to nurse's office

Discipline

Head on desk as punishment
Listening to class, other student, or oneself being reprimanded

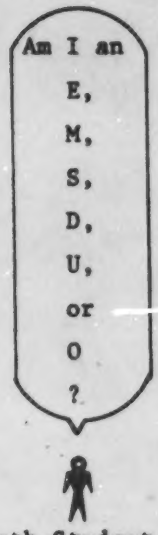
*May be coded as management, depending on context and tone of voice.

1V26 consists of three videotape clips of three classrooms. During each observation scan of a classroom, participants will be focusing on unengaged student behaviors.

3/19/80

CODING CLASSROOM PICTURES

The following set of pictures (1H29d-f) illustrates the activities of each student and the teacher at two minute intervals during the last 8 minutes of a math class.

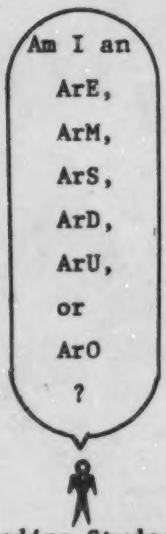


Math Student

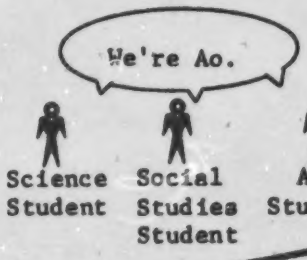
You will be coding each student according to the definitions of engaged and unengaged on 1H22. At the bottom of each picture, the number of students assigned to each subject is recorded. Label each student who is assigned to math with one of the following codes:

E - Engaged
M - Management/transition
S - Socializing
D - Being disciplined
U - Unoccupied/observing
O - Out of the room

If the student is assigned to reading, write Ar before the codes listed above. No code is necessary if a student leaves school.



Reading Student



Science Student | Social Studies Student | Art Student

If the student is assigned to a subject other than reading/language arts or math, label him/her Ao for Assigned other.

Remedial Reading Student | Band Student | Title I Student

If the student is assigned to a pullout program, label him/her PO for Pullout.

Before coding any students, note what the teacher is doing as this may affect whether students are engaged. If a student is working on materials, assume they are math materials unless indicated otherwise. When you complete an Engagement Rate Form for this classroom, the following identification information should be put at the top of the form.

FACT SHEET

State-03
District-47
School-08
Teacher-Casini

Date-10/9/82
Coder-Your Name or Code
Grade-3

Present-28
Part of Class-End

3/19/80

PRE-OBSERVATION FORM

1H29b

Teacher Tony Casini

Subject Math

Observer You

Observation Date 10/9/82

Time Interval 1:22 - 1:30

No. of Students Present 28

Part of Period beginning middle (end)

Record number of students assigned to each category during the observation period.

Times	Reading/ Language Arts	Math	Other Subjects Specify:	Pull-Out	Out of Room Specify:
1:22-1:30	Any student not assigned to art or science may do reading when math is completed.	28 students assigned math at beginning of observation	4 students in back row assigned art when math is completed One student will do science when math is completed	Towards the end of the observation, 4 students go to Remedial Reading	3 students to Nurse for eye examination

Briefly describe assignments for each subject and free-time activities (attach worksheets if possible).

Reading

Group 1

Group 2 } Any student not assigned to art or science may read or complete reading work when math worksheet is done.

Group 3

Language Arts

Math Students will be completing a worksheet on addition with regrouping. Students may use number rods to complete the worksheet. When students finish the worksheet, they may work in their math workbooks or write the worksheet problems on the board.

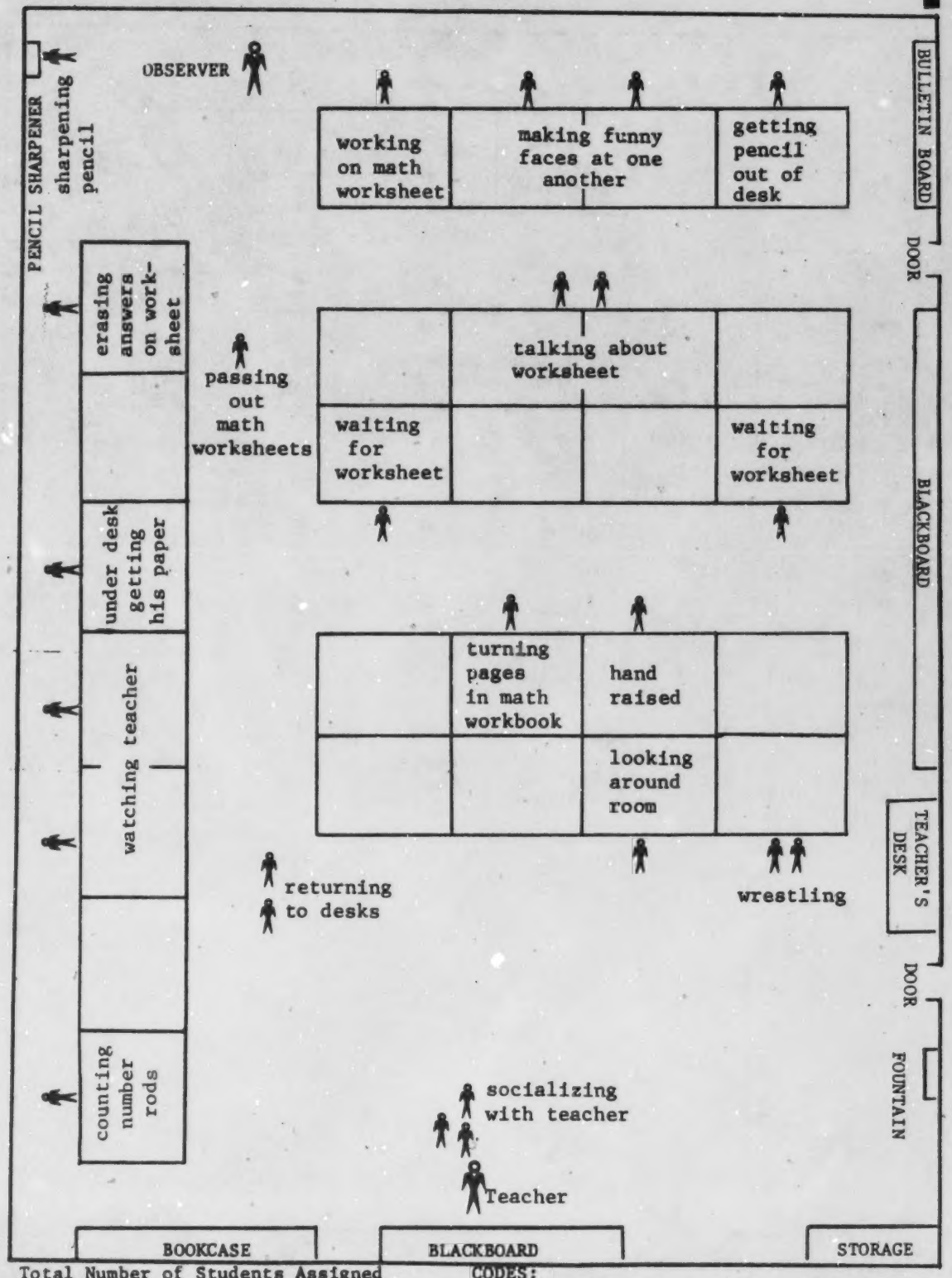
Other The four top math students who are in the back of the room will be cutting out pumpkins for the bulletin board when they have finished the math worksheet. One other student will complete her science assignment when her math worksheet is finished. 1.48

Tony Casini's Third Grade Math Class at New Delpen Elementary School on October 9 at 1:22 p.m.

1

1H29d

3/19/80



Total Number of Students Assigned

Reading/Language Arts ____

Math 28

Other ____

Pullout ____

64

1.49

CODES:

M - Management/Transition
S - Socializing
D - Discipline
U - Unoccupied/Observing
O - Out of Room

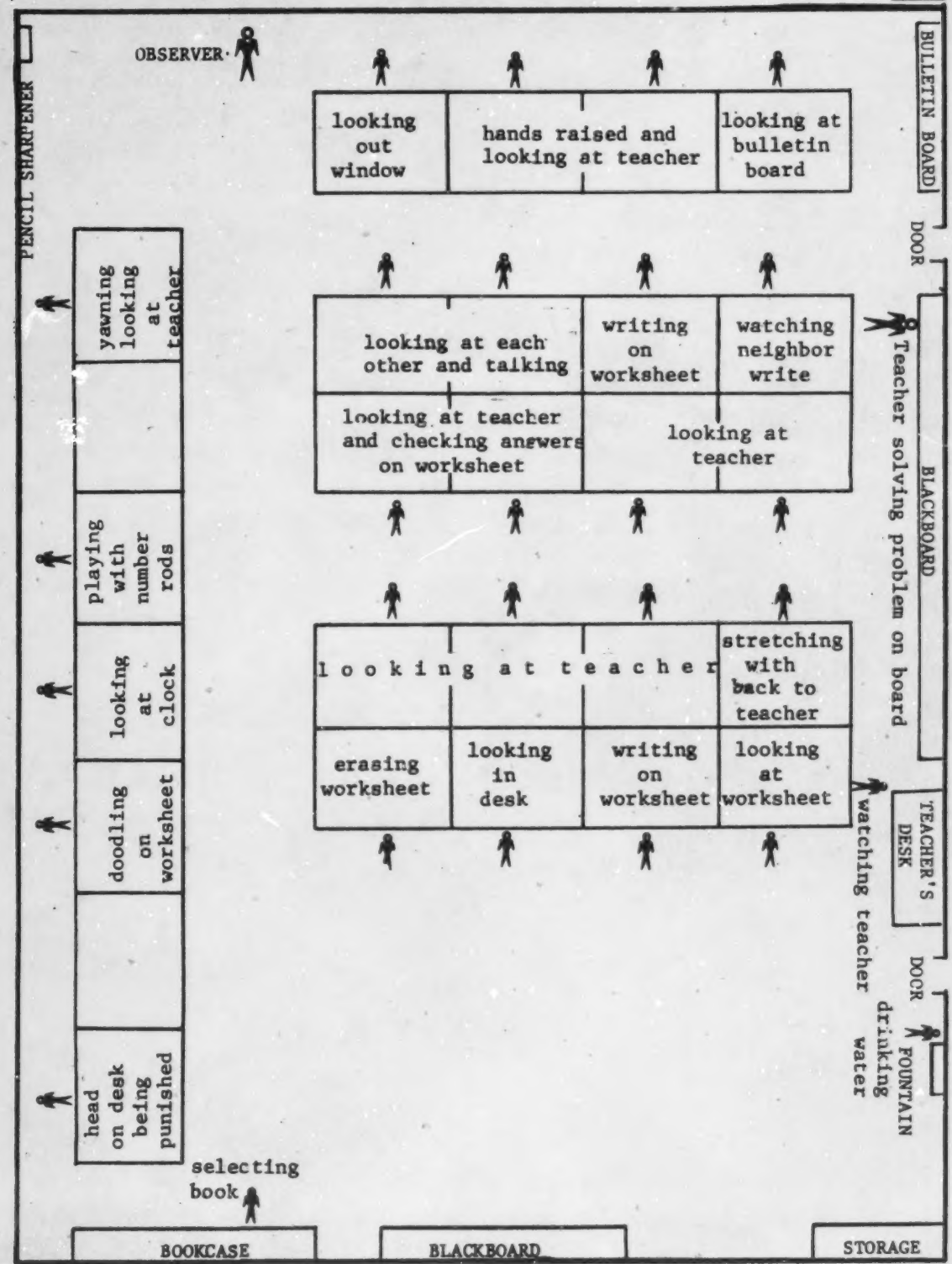
E - Engaged
Po - Pullout
Ar - Assigned Reading
Ao - Assigned Other

Tony Casini's Third Grade Math Class at New Delpen Elementary School
on October 9 at 1:24 p.m.

2

1H29e

3/19/80



Total Number of Students Assigned
Reading/Language Arts 1
Math 27
Other ____
Pullout ____

65

1.50

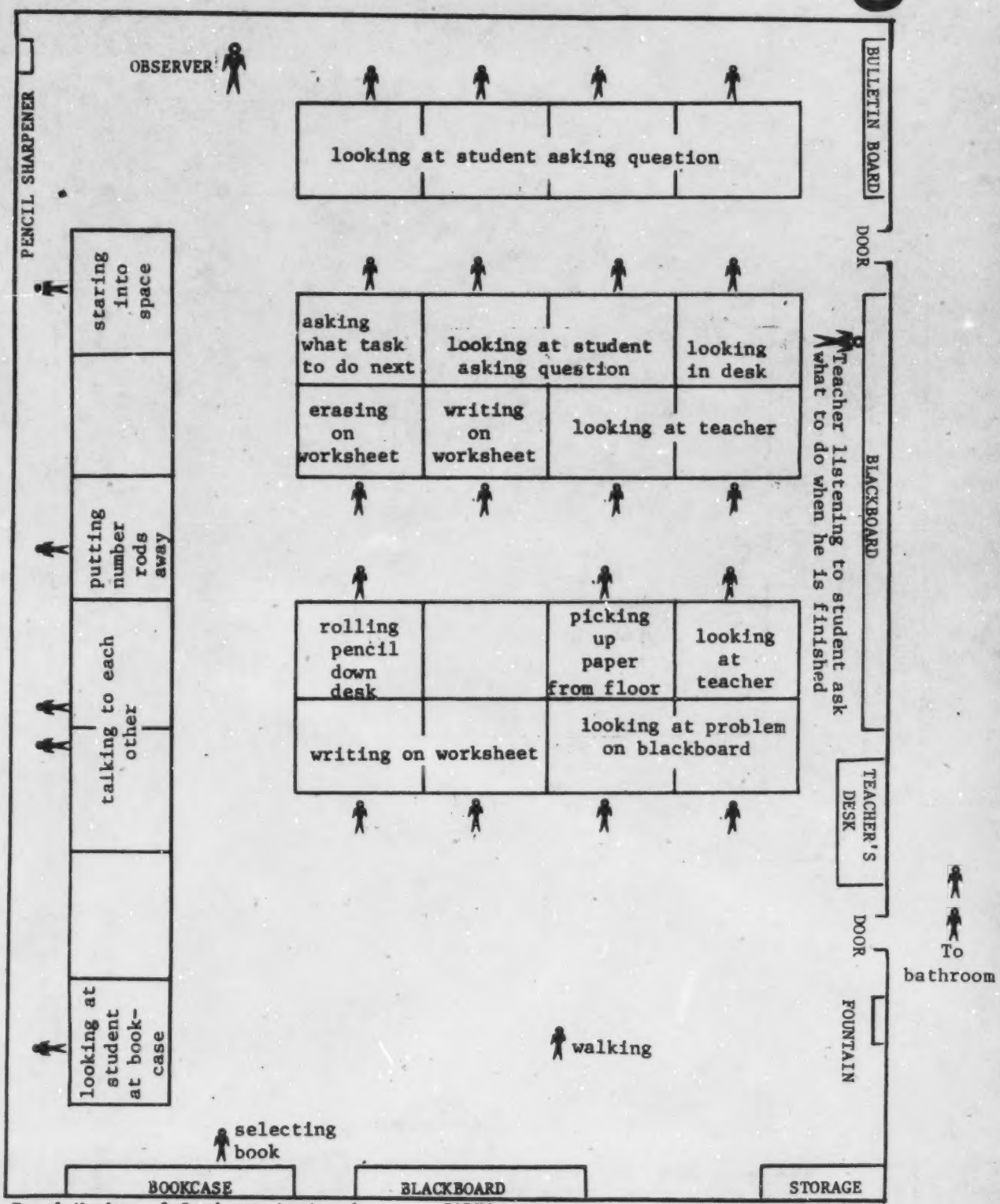
CODES:
M - Management/Transition
S - Socializing
D - Discipline
U - Unoccupied/Observing
O - Out of Room
E - Engaged
Po - Pullout
Ar - Assigned Reading
Ao - Assigned Other

Tony Casini's Third Grade Math Class at New Delpen Elementary School
on October 9 at 1:26 p.m.

3

1H29f

3/19/80



Total Number of Students Assigned
Reading/Language Arts 1
Math 27
Other ____
Pullout ____

66
1.51

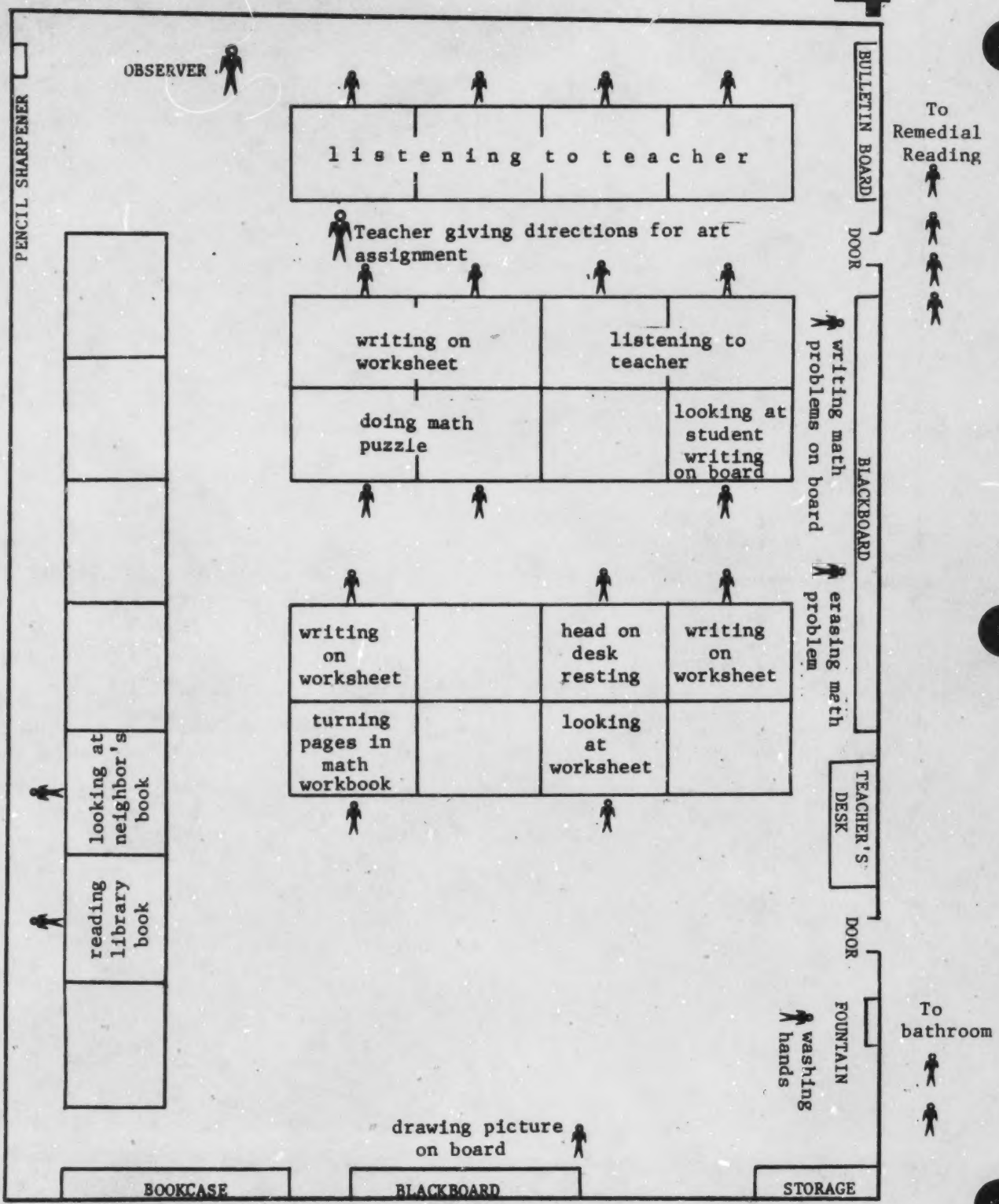
CODES:
M - Management/Transition
S - Socializing
D - Discipline
U - Unoccupied/Observing
O - Out of Room
E - Engaged
Po - Pullout
Ar - Assigned Reading
Ao - Assigned Other

Tony Casini's Third Grade Math Class at New Delpen Elementary School
on October 9 at 1:28 p.m.

4

1H29g

4/14/80



Total Number of Students Assigned

Reading/Language Arts 1
Math 19
Other 4
Pullout 4

67

1.52

CODES:

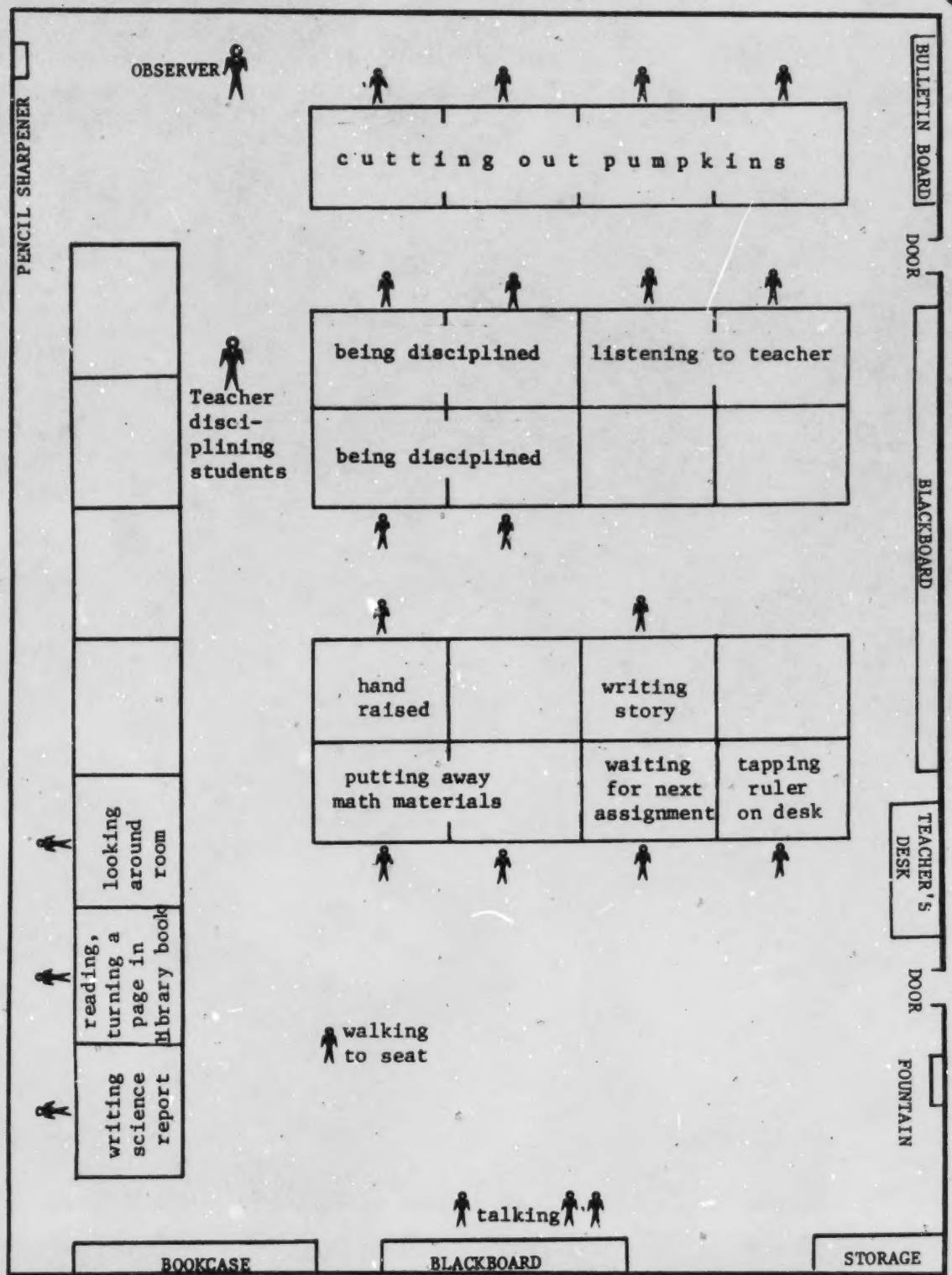
M - Management/Transition
S - Socializing
D - Discipline
U - Unoccupied/Observing
O - Out of Room

E - Engaged
Po - Pullout
Ar - Assigned Reading
Ao - Assigned Other

Tony Casini's Third Grade Math Class at New Delpen Elementary School on October 9 at 1:30 p.m.

5 1H29h

3/19/80



Total Number of Students Assigned
Reading/Language Arts 2
Math 16
Other 5
Pullout 4

CODES:
M - Management/Transition
S - Socializing
D - Discipline
U - Unoccupied/Observing
O - Out of Room
E - Engaged
Po - Pullout
Ar - Assigned Reading
Ao - Assigned Other

COMPLETED ENGAGEMENT RATE FORM FOR CLASSROOM PICTURES

KEY FOR 1H29

STATE _____
DISTRICT _____
SCHOOL _____
TEACHER Casini
CODER _____

ENGAGEMENT RATE FORM

STATE # 03 SCHOOL # 08 DATE 10-9 GRADE 3

DISTRICT # 47 TEACHER # ___ CODER # ___ # STUDENTS PRESENT 28

PART OF CLASS OBSERVED Beg.___ Mid.___ End ✓

	TIME	1	2	3	4	5	6	7	8	9
		1:22	1:24	1:26	1:28	1:30				
READING/LANGUAGE ARTS	ASSIGNED		1	1	1	2				
	MANAGEMENT/ TRANSITION		1	1						
	SOCIALIZING									
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING									
	OUT OF ROOM									
	TOTAL UNENGAGED		1	1	0	0				
	ENGAGED		0	0	1	2				
MATHEMATICS	ASSIGNED	28	27	27	19	16				
	MANAGEMENT/ TRANSITION	10	2	14	2	5				
	SOCIALIZING	9	2	2		3				
	DISCIPLINE		1			6				
	UNOCCUPIED/ OBSERVING	1	6	3	5	2				
	OUT OF ROOM	3		2	2					
	TOTAL UNENGAGED	23	11	21	9	16				
	ENGAGED	5	16	6	10	0				
	OTHER ASSIGNED				4	5				
	PULL OUT ASSIGNED				4	4				
	NO. OF STUDENTS PRESENT	28	28	28	28	27				

1/21/80

1T30b

COMPLETED ENGAGEMENT RATE FORM FOR CLASSROOM PICTURES

KEY FOR 1H29

	TIME	10	11	12	13	14	15	TOTAL	ENGAGEMENT RATE
READING/LANGUAGE ARTS	ASSIGNED							5	ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION							2	
	SOCIALIZING								$\frac{3}{5}$ =
	DISCIPLINE								
	UNOCCUPIED/ OBSERVING								60%
	OUT OF ROOM								
	TOTAL UNENGAGED							2	
	ENGAGED							3	
MATHEMATICS	ASSIGNED							117	ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION							33	
	SOCIALIZING							16	$\frac{37}{117}$ =
	DISCIPLINE							7	
	UNOCCUPIED/ OBSERVING							17	32%
	OUT OF ROOM							7	
	TOTAL UNENGAGED							80	
	ENGAGED							37	
	OTHER ASSIGNED							9	
	PULL OUT ASSIGNED							8	
	# STUDENTS PRESENT								

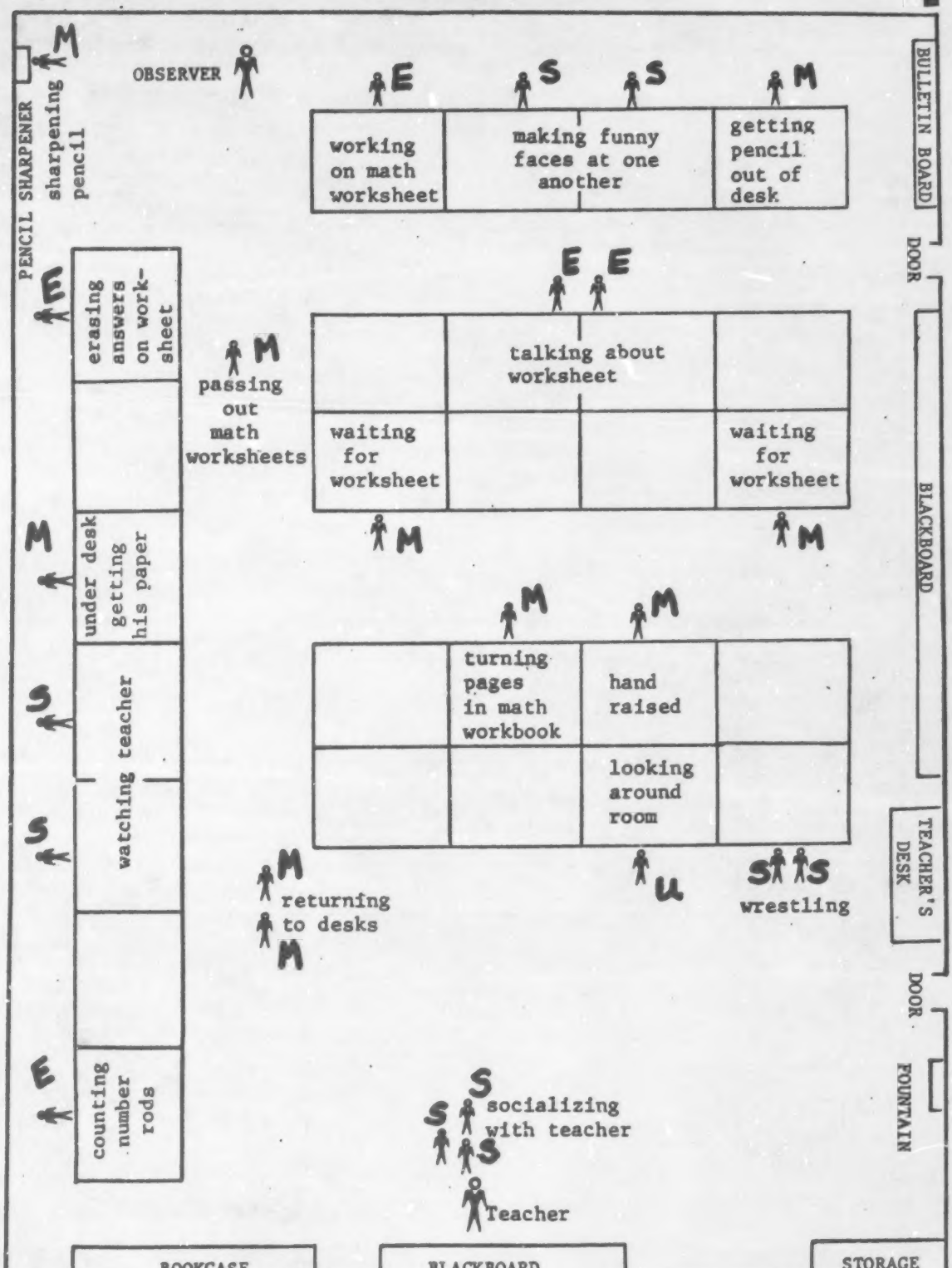
KEY FOR 1H29

Tony Casini's Third Grade Math Class at New Delpen Elementary School on October 9 at 1:22 p.m.

1T30c

1

4/14/80



Total Number of Students Assigned

Reading/Language Arts ____

Math 28

Other ____

Pullout ____

CODES:

M - Management/Transition
S - Socializing
D - Discipline
U - Unoccupied/Observing
O - Out of Room

E - Engaged
Po - Pullout
Ar - Assigned Reading
Ao - Assigned Other

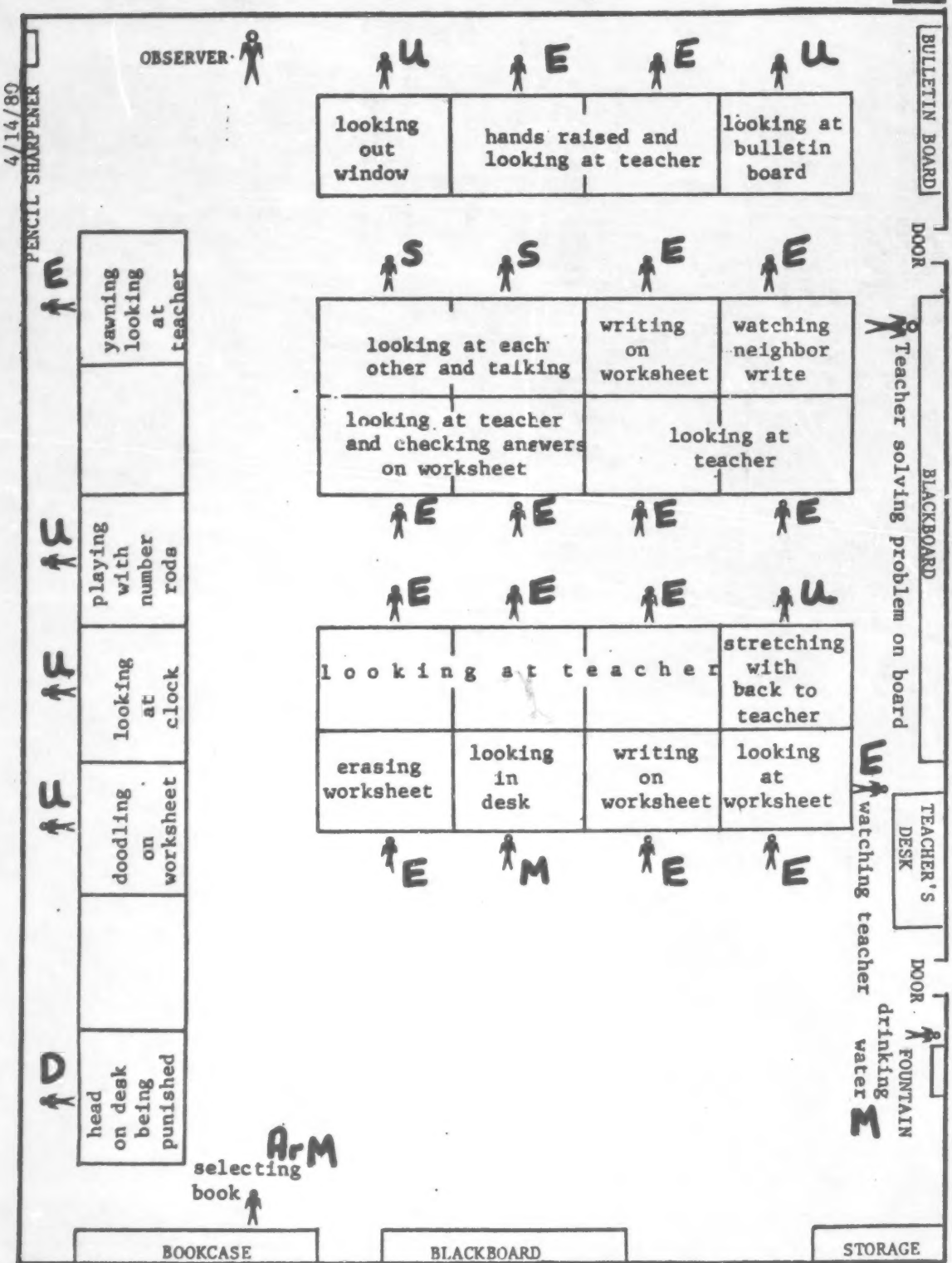
1.571

KEY FOR 1H29

1T30d

Tony Casini's Third Grade Math Class at New Delpen Elementary School
on October 9 at 1:24 p.m.

2



Total Number of Students Assigned

Reading/Language Arts 1

Math 27

Other ____

Pullout ____

72

1.57

CODES:

M - Management/Transition
S - Socializing
D - Discipline
U - Unoccupied/Observing
O - Out of Room

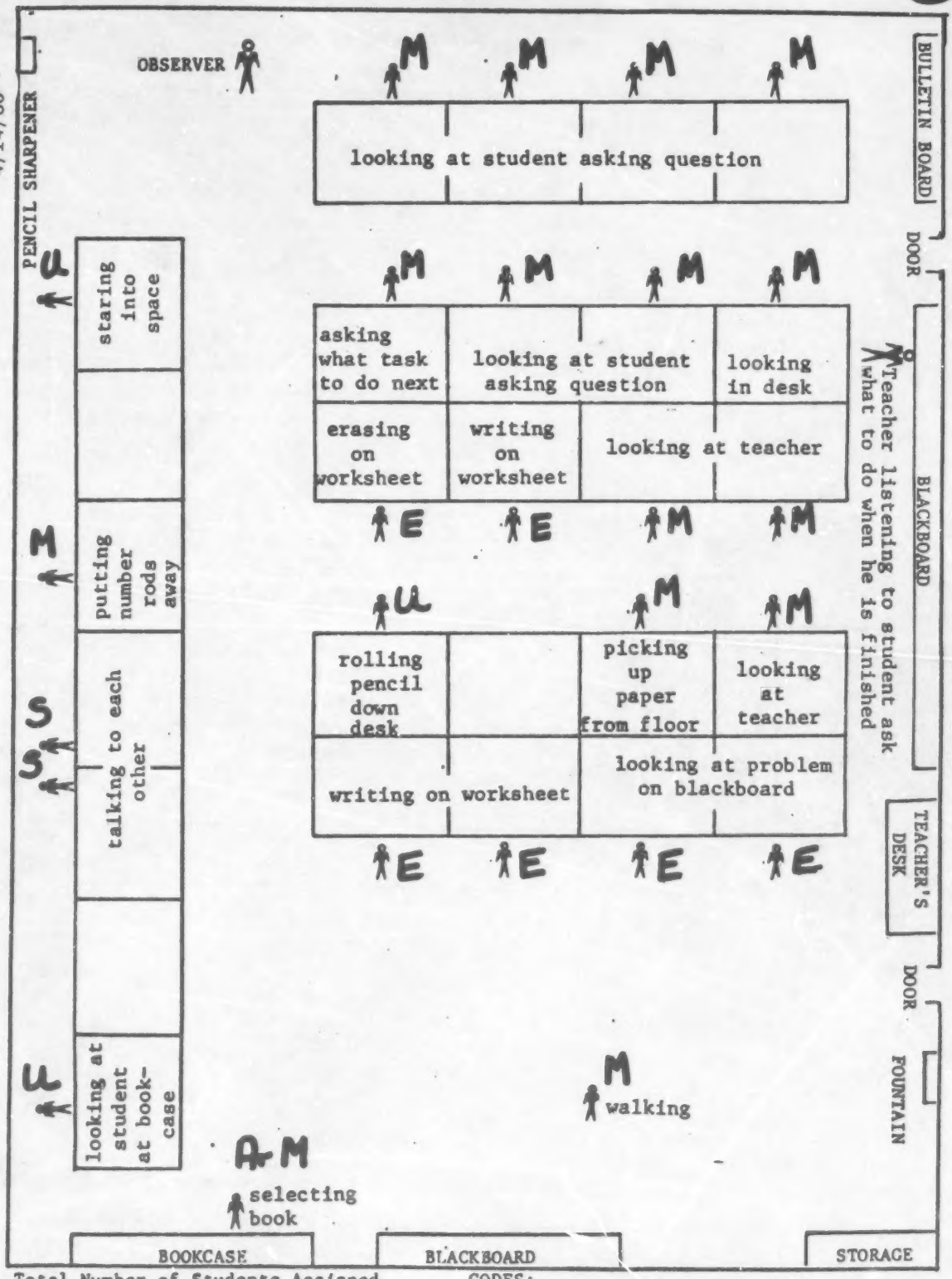
E - Engaged
Po - Pullout
Ar - Assigned Reading
Ao - Assigned Other

KEY FOR 1H29

Tony Casini's Third Grade Math Class at New Delpen Elementary School
on October 9 at 1:26 p.m.

1T30e

3



Total Number of Students Assigned
Reading/Language Arts 1
Math 27
Other ____
Pullout ____

73
1.58

CODES:

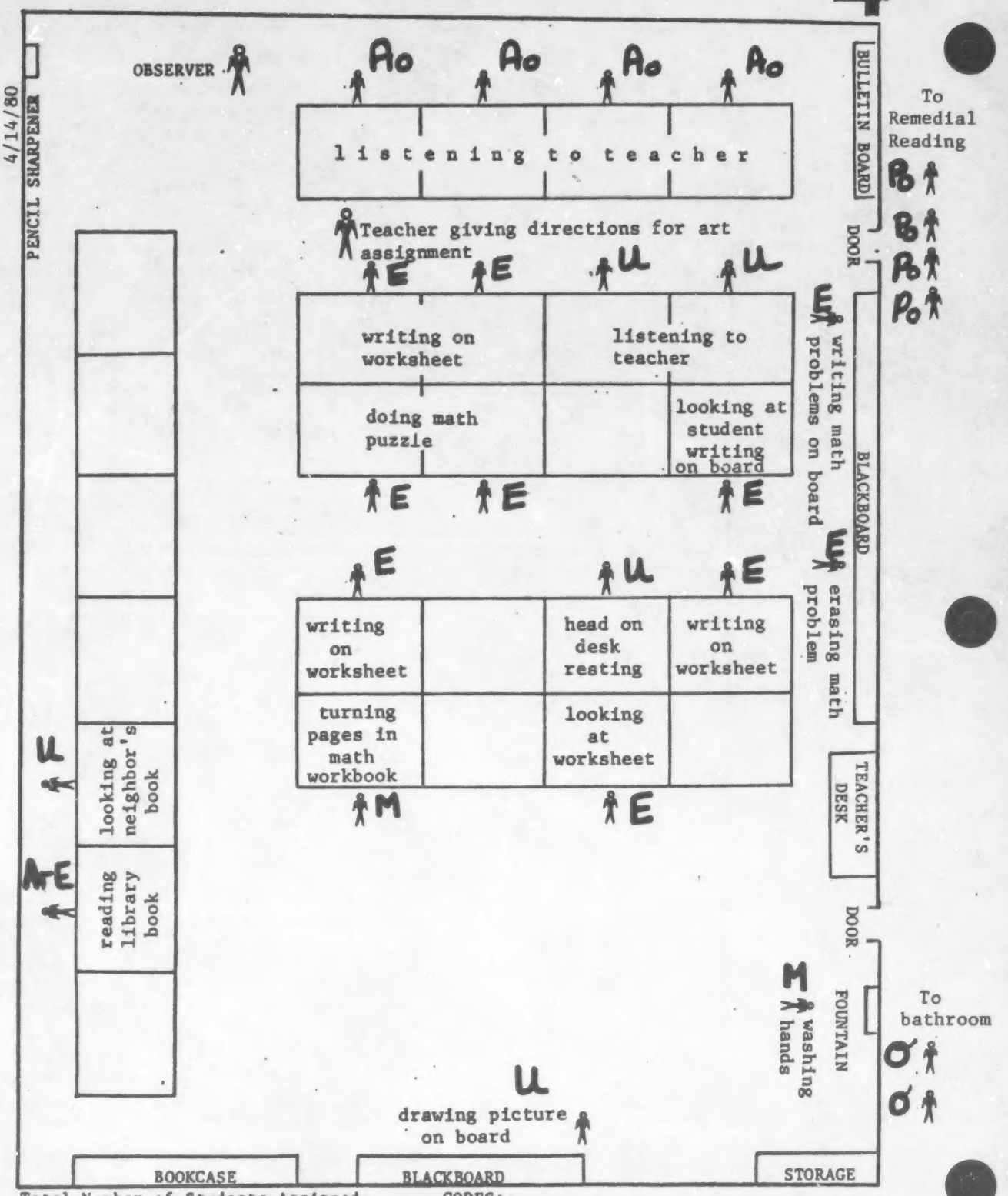
M - Management/Transition
S - Socializing
D - Discipline
U - Unoccupied/Observing
O - Out of Room
E - Engaged
Po - Pullout
Ar - Assigned Reading
Ao - Assigned Other

KEY FOR 1H29

Tony Casini's Third Grade Math Class at New Delpen Elementary School on October 9 at 1:28 p.m.

1T30f

4



Total Number of Students Assigned

Reading/Language Arts 1
Math 19
Other 4
Pullout 4

74 1.59

CODES:

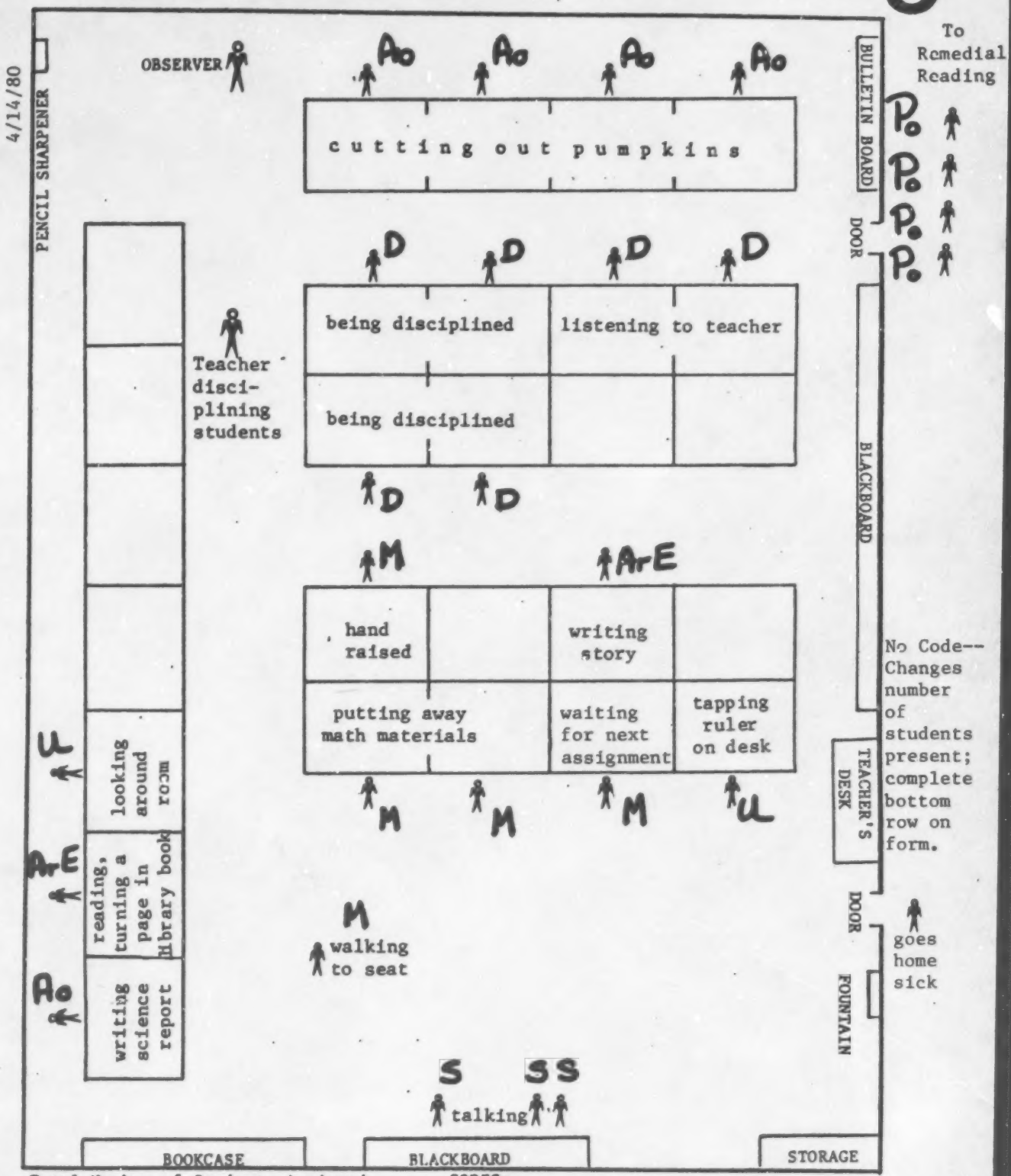
M - Management/Transition
S - Socializing
D - Discipline
U - Unoccupied/Observing
O - Out of Room
E - Engaged
Po - Pullout
Ar - Assigned Reading
Ao - Assigned Other

KEY FOR 1H29

1T30g

Tony Casini's Third Grade Math Class at New Delpen Elementary School on October 9 at 1:30 p.m.

5



Total Number of Students Assigned
Reading/Language Arts 2
Math 16
Other 5
Pullout 4

75

1.60

CODES:

M - Management/Transition
S - Socializing
D - Discipline
U - Unoccupied/Observing
O - Out of Room
E - Engaged
Po - Pullout
Ar - Assigned Reading
Ao - Assigned Other

NOTES

D.1.b. The Validity of Using Teachers as Instructional Time Data Collectors

Richard Marliave and other researchers working on the Beginning Teacher Evaluation Study (BTES) at the Far West Laboratory for Educational Research and Development in San Francisco have analyzed when it is appropriate to have teachers collect instructional time data. In a paper presented at the 1977 annual AERA meeting, they stated that teacher records of allocated instructional time were judged as acceptable when compared with observer records. However, teacher estimates (ratings) on student engagement rates correlated with student aptitude but not with observer ratings of student engagement rates.

D.1.c. Student Engaged Time: A Comparison of Data Collection Procedures

If comparisons to reference materials are to be meaningful, then the data collected by teachers and supervisors must be essentially equivalent to data collected using the original Stallings and Kaskowitz (1974) procedures. For this reason, a small study was made to compare data collected using the original instrument with data collected using the newly-developed instruments and procedures.

The participants involved in this study included eleven teachers (grades 1-6) from three different elementary schools. Each of these teachers was participating in a basic skills instructional improvement project, and they and their colleagues had been trained to collect classroom data using the materials and procedures included in this guide. Data was collected by teachers and supervisors on two days for both reading/language arts and mathematics. On these same days, an observer trained only in the Stallings and Kaskowitz observation system was also collecting data. Estimates of student engaged time using these two separate systems (teacher and researcher) were then compared using a t-test technique for correlated observations (Winer, 1971).

The means and standard deviations of student engaged time measures are shown below. The correlation between the two sets of measures for reading/language arts was .75; for mathematics the correlation was .78. The correlation between individual scores for both subjects over the two-day period was .90. T-tests using a paired data procedure indicated non-significant differences between the means ($t = .28$ for reading/language arts; $t = .78$ for math; $t_{.05,21} = 1.72$).

Student Engaged Time for
Reading/Language Arts and Mathematics
Using Two Observation Systems

	Reading/Language Arts		Mathematics	
	Researcher	Teacher	Researcher	Teacher
Student Engaged Time (minutes)	106.9	100.6	45.0	37.8
Standard Deviation	34.2	29.5	15.8	13.6

The results of the study comparing data collected using both the Stallings and Kaskowitz instrument and the instruments used in this guide indicate that essentially equivalent data are being produced. Of major practical importance, however, is that the process used in this guide requires thirty minutes of observation in the classroom, whereas the Stallings and Kaskowitz procedure requires full-day observations.

D.6.a.(1).(h). Explanation of Number of Students Present Row on the Engagement Rate Form

The bottom row on the Engagement Rate Form, indicating the number of students present during each scan of the classroom, may be used when the number of students present changes during an observation. For example, on the front of the Engagement Rate Form shown on the next page, the number of students present row is used only when this number changes from the initial one recorded at the top of the form.

Observation(s)	Number of Students Present	Explanation
1-2	30	Number of students present has not changed.
3-6	31	An advanced student from first grade comes into the room for reading instruction, so the number of students present increases by one.
7-8	32	A tardy student arrives and immediately goes to a remedial reading pullout program, so the number of students increases again by one.
9	31	One of the students assigned to reading goes home sick, so the number of students present decreases by one.

The number of students present row may also be used to check that all students are assigned to some activity by adding the number of students assigned to reading/language arts, math, other, and pullout and recording the total in this row; this total should be the same as the number of students present recorded at the top of the form.

8/28/80

STATE _____
DISTRICT _____
SCHOOL _____
TEACHER _____
CODER _____

ENGAGEMENT RATE FORM

STATE # 03 SCHOOL # 08 DATE 12-1-81 GRADE 2

DISTRICT # 47 TEACHER # A226 CODER # SYAT # STUDENTS PRESENT 30

PART OF CLASS OBSERVED
Beg. ✓
Mid. ___
End ___

	TIME	1 8:30	2 8:31	3 8:32	4 8:33	5 8:34	6 8:35	7 8:36	8 8:37	9 8:38
READING/LANGUAGE ARTS	ASSIGNED	28	28	29	29	29	29	29	29	28
	MANAGEMENT/ TRANSITION	II	III		I	III	II		III	IIII
	SOCIALIZING			II						
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING	I	II		I	II		III	III	III
	OUT OF ROOM									
	TOTAL UNENGAGED	3	5	2	2	5	2	3	6	8
	ENGAGED	25	23	27	27	24	27	26	23	20
MATHEMATICS	ASSIGNED									
	MANAGEMENT/ TRANSITION									
	SOCIALIZING									
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING									
	OUT OF ROOM									
	TOTAL UNENGAGED									
	ENGAGED									
	OTHER ASSIGNED									
	PULL OUT ASSIGNED	2	2	2	2	2	2	3	3	3
	NO. OF STUDENTS PRESENT			31	31	31	31	32	32	31

D.7. Engagement Rate Form

[This note discusses how the Engagement Rate Form should be completed for the classroom pictures (1H29) that were previously coded. A completed copy of this form may be seen on 1T30.]

The Engagement Rate Form is a classroom observation instrument used by observers to record data on the percent of assigned students actively working in either reading/language arts or math. This form was developed to provide practitioners with an instrument that can be used to collect data that is essentially equivalent to the data base (Stallings and Kaskowitz Follow Through Evaluation Study, 1974). At the top of the front of this form, there is a section for identification information. In the next sections in the middle of the form, data for each observation are recorded sequentially. If more than nine observations are made, the second side of this form will be used. In the last column on the second side, the engagement rate in each subject is calculated. The directions for using this form are at the bottom of both sides of the form.

The first section to be completed by the observer involves the identification information at the top of the form. In the upper left-hand corner, the state, district, school, and teacher are identified. If a teacher wishes to share his/her data without revealing its source, this information can be coded along the top center of the form; the left-hand corner can then be cut away. At the top right are blanks for the date, coder number, grade, number of students present, and part of class observed. The coder who completes this form will probably be another teacher or an administrator, since the classroom teacher will be too busy to code this form while he/she is teaching. The number of students present is entered at the top of the form if the attendance number in the classroom does not change during the observation. If the number of students present changes during the observation due to students coming to school late or students from another class being assigned to this classroom for instruction, the number present for each observation will be recorded at the bottom of the form in the appropriate column. Usually the observation schedule chosen provides for only part of the allocated time to be observed. Then the coder would indicate at the top of the form whether the part observed is the beginning, middle, or end of the allocated time, since engagement rates may differ among these time periods.

First the coder completes the identification information at the top of the form for the classroom pictures that were previously coded. The codes needed to complete this part of the form are given at the bottom of the directions sheet for the classroom pictures (1H29a).

D.7.--Continued

Record the codes for the state, district, and school. Then record the teacher's name, which he will change to his key code when the completed form is given to him. Now record the date, your name or key code for the coder, the grade, and the number of students present.

On two previous days, the coder observed the beginning and middle of a math class. So on October 9, the coder observed the last part of a math class. *In the far right of the heading, draw a check beside the word "end" to indicate the part of the period being observed.*

The numbers of students are recorded in the section of the form for the subject to which they are assigned. There are separate sections on the form for reading/language arts and math. At the bottom of the form, there is a section for recording the number of students assigned to subjects other than reading/language arts and math, the number assigned to pullout programs, and the number present. This information is useful to know when you are selecting strategies in Phase Three of the Cycle.

Look at the first classroom picture that you coded. Record the time the first observation was made (1:22) at the top of the first observation column.

To find out how many students are assigned to each subject, look at the bottom of the classroom picture. *Since all the students are assigned to math at this time, record all the students (28) for the number assigned in the first column of the math section in the middle of the page.*

Now count the number of unengaged students who are in management/transition activities during this observation. Since there were 10 students in management/transition activities, record 10 next to management/transition in the math section in the first column.

Count the number of students who were coded as socializing during this observation. Since 9 students were socializing, enter this number next to socializing in the first column in the math section.

Now count the number of students who were coded as being disciplined, unoccupied/observing, or out of the room. Record these numbers beside the appropriate categories in the first column of the math section (discipline - blank, unoccupied - 1, out of room - 3).

To find the total number of unengaged students, add the numbers in each unengaged category (10 + 9 + 1 + 3) and record this number (23) in the Total Unengaged row in the first column of the math section.

To find the number of engaged students, subtract the number unengaged (23) from the number assigned (28). Record this number (5) in the row labeled Engaged in the last box in the first column of the math section.

D.7.--Continued

During the second observation, all the students were not assigned to math. One student finished math work and began reading work. Therefore this student will be recorded at the top of the form in the reading/language arts section. *Record 1 for this student in the Assigned row of the reading section. Since this student was coded as unengaged in a management/transition activity, record a 1 in this category in the second column of the reading section. Then total the number of unengaged (1) and record it in the Total Unengaged row of the reading section. Subtract the total unengaged (1) from the number assigned (1) to find the number engaged. Record the number engaged (0) in the second column of the reading section in the row labeled Engaged.*

Now data for the math students during the second observation at 1:24 will be recorded. *Record the number of students assigned and the number unengaged in each category. Total the number unengaged and subtract to find the number engaged.*

Complete the column for the next observation by recording the data in the reading and math sections.

During the fourth observation at 1:28, four students had gone to a pullout program, remedial reading, and four students had been assigned to another subject, art. *At the bottom of the form in the fourth column, record the four art students in the Other Assigned row and the four remedial students in the Pullout Assigned row.*

Now record the number assigned, the number unengaged, and the number engaged in the reading section of this column. Then record the data for the math section.

Now complete the form for observation 5. One student goes home sick during this observation. Since the number of students present changes to 27, the bottom row of the Engagement Rate Form should be completed.

Before the engagement rates may be calculated, each row must be totaled. *In the reading/language arts section, add across the Number Assigned row and record this total in the last box in the row. Then add each of the Unengaged rows and the Engaged row and record the totals in the last box in each row.*

Now total each row in the math section.

Total the Assigned Other and Pullout rows at the bottom of the form.

To find the engagement rate for reading/language arts, divide the total number engaged during reading/language arts by the total number assigned to this subject.

To find the engagement rate for math, divide the total number engaged in math by the total number assigned to math.

Now check your answers on 1T30.

If you forget how to complete this form, refer to the directions at the bottom of both sides of the form.

E. Observer training on the Engagement Rate Form (1-3 hours)

Rationale. Observers need to know how to use the Engagement Rate Form in order to collect information accurately.

Materials	Strategy
✪1V32 a, b, or c 1H31--Blank Classroom (a-r) Diagrams 1V32--Discrimination (a-c) of Engaged and Unengaged Behaviors --Engagement Rate Forms (3) --Calculators	Decide before the session which tapes are most appropriate for use. Classroom A is a fourth-grade teacher-directed reading/language arts lesson; the first scan includes a wide range of unengaged behaviors and is somewhat difficult to code, while the remaining scans are much easier to code. Classroom B shows third-grade math seatwork, while Classroom C is a first-grade teacher-directed math lesson. If only one tape is to be coded, you may wish to discuss the first scan of 1V32a in detail and then code either 1V32b or 1V32c. Discuss the classroom diagram and teacher comments before viewing each tape. When viewing the first classroom, point to each student as the camera moves down each row, having participants mark the correct coding for each student on the blank classroom diagrams; this is particularly important with 1V32a. Put the "still-frame" on each row so participants will have time to observe each student. View each student only once; if he/she moves or changes activities, do not change the code. Remember to code students who are moving around the room once. Check answers for each student at the end of each observation. The correct coding of each student is shown in Note E.1. When disagreements arise during coding, first get agreement as to proper descriptions of student behaviors, and then refer to the definitions (1H22) for the proper

Observer training on the Engagement Rate Form--Continued

Materials	Strategy
	categorization. If major disagreements or difficulties still occur after observations for the first classroom are completed, use the diagrams for a second classroom and repeat the same process. When disagreements are minor (participants are within the indicated range for engaged students in 4 out of 5 observations) and participants are comfortable with the definitions, have participants complete the Engagement Rate Form from the classroom diagrams. Have participants independently code the remaining classrooms directly on the Engagement Rate Form without using the classroom diagrams, first providing the identifying information at the top of the form. Check answers by checking all entries after each observation (should be within range given in key), the total number of students engaged over all observations (should be within the range given in key), and the rank ordering of the frequency of behaviors in the unengaged categories. If classroom diagrams are used for all three classrooms, have participants code classrooms B and/or C again directly on the Engagement Rate Form.
✪1V33--Independent Practice in Observation --Engagement Rate Form --Calculators ✪1T34--Answer Keys (a-j) for 1V32 and 1V33	Have participants independently complete an Engagement Rate Form for this videotape. In order to get a realistic sense of recording observations, have participants complete the first five observations before discussion begins. Put the "still-frame" on each row or part of a row so participants will have time to observe each student and record tally marks or numbers on their forms.

Observer training on the Engagement Rate Form--Continued

Materials	Strategy
	At the end of the first five observations, have participants total the rows and calculate the engagement rate. Then have them check their form. See Note E.2 for the correct coding of each student. Participants meeting criterion (within range for number engaged for 4 out of 5 observations and within range for total engaged) on this tape are ready for the demonstration of mastery activities; others should go back and review areas in which errors were made and code the remaining four observations on the tape.

Note: Watching videotape is very tiresome. Be sure to plan sufficient breaks so fatigue does not become a problem.

Alternative Strategies

1. When coding videotapes using classroom diagrams (1H31), only record unengaged behaviors.
2. When observing, the categories of management/transition, socializing, discipline, unoccupied/observing, and out of room may be omitted on the Engagement Rate Form and only total unengaged recorded for each observation. The advantage of this strategy is that it is quicker and easier to code the form. The disadvantage is that the teacher will not have detailed information helpful in making decisions about program observations in Selection and Preparation.
3. Participants will probably proceed at different rates in learning to use the Engagement Rate Form. One strategy that may be useful in accommodating these individual differences is meeting in small groups with a leader for each group; this will require one videotape machine for each group.
4. If participants use the blank diagrams for coding all three classrooms in 1V32 or if additional practice is desired, you may wish to use one or more of the five observation clips included on the Supplementary Tape and described in Appendix E.
5. You may wish to break up videotape training by completing the activities in Topic G (Allocated Time Log) and/or Topic H (Scheduling).

†1. Videotape of three classrooms (1H31, 1V32, 1T34)

   a. Blank classroom diagrams

      (1) Numbers show order in which students are coded and location of each

      (2) Same number is not always same student

b. Five observations in each room

(1) Beginning of fourth grade language arts--teacher-directed whole class lesson on comma and apostrophe rules; a worksheet is handed out, and whole group lesson on sheets proceeds

(a) Teacher--Green

(b) Date--11/14

(c) Number of students present--28

(d) Time observations begin--1:45 p.m. (at two minute intervals)

(2) Middle of third grade math--seatwork and free time math activities; teacher is working with individual students at her desk

(a) Teacher--Jones

(b) Date--4/17

(c) Number of students present--16

(d) Time observations begin--1:05 p.m.

(3) Middle of first grade math--teacher-led whole class instruction on subtraction with some students doing problems at board; students begin math seatwork; there is one pullout student and one student out of room during observation #5

(a) Teacher--Valdez

(b) Date--11/19

(c) Number of students present--27

(d) Time observations begin--1:15 p.m. (at two minute intervals)

⊛ †2. Independent videotape practice for one classroom

a. Beginning of first grade math class--teacher-directed whole class lesson on counting by twos; some students are counting beans at desk and one student walking on number line in front of room

b. First five consecutive observations of class completed at one-minute intervals

c. Identification information

(1) Teacher--Smith

(2) Date--4/16

(3) Number of students present--20

(4) Time observations begin--12:30 p.m.

d. Last four observations completed at one-minute intervals

MATERIALS

In addition to the materials included here, the following are needed:

Engagement Rate Forms (4) (Forms)

Pre-Observation Form for Classroom A - Grade 4

Teacher *Cathy Green* **Subject** *Reading/Language Arts*

Observer _____ **Observation Date** *November 14*

Time Interval *2 minutes* **Circle Part of Period** (beginning) middle end

No. of Students Present *28*

Record number of students assigned to each category during the observation period.

Times	Reading/ Language Arts	Math	Other Subjects Specify:	Pull-Out	Out of Room Specify:
1:45	*28 students assigned to reading/ language arts*				

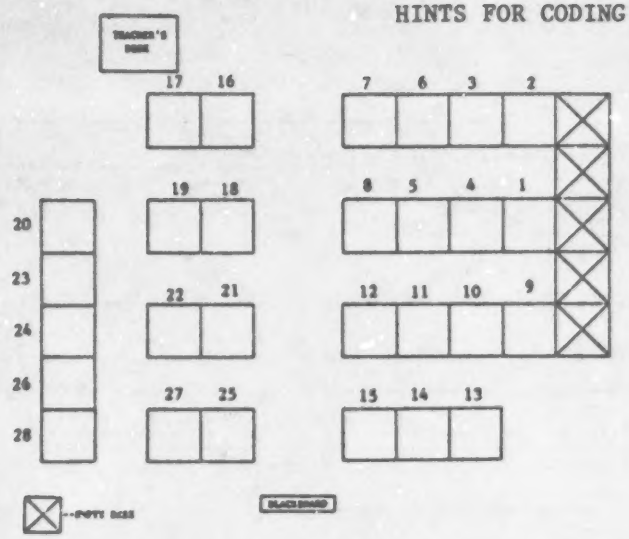
Pre-Observation Form (cont'd)

Briefly describe assignments for each subject and free-time activities (attach worksheets if possible).

Reading/Language Arts

This class has been working on punctuation activities. At the beginning of the observation the students are putting headings on their worksheets. Then I begin a whole group lesson on punctuation.

HINTS FOR CODING CLASSROOM A



The classroom's arrangement and general viewing pattern for coding are shown. After the first clip the third row of students (#9-#12) is observed in the reverse order.

The teacher makes the following comments: "Put your name on all pages... Now, I don't have to explain this, because you have--"

Observation #1

"You know that we have been doing the-ah-punctuation. We did punctuation activity 1 with these skills. Three general rules follow for comma rules and for the use of the comma. Now, if you look in #1, after the salutation of a friendly letter. The salutation is sometimes also called the? ...Greeting. That's rule one. Rule two: to separate words in a series. Excuse me, some of you aren't paying attention. ...You can't pay attention and watch that, too. Number three: to separate month and year, to separate names of city and state." ...

Observation #2

"Which rule would that be? ... Yvette? ... Separate a month and year? ... Tina? ... To set off certain phrases in sentences? It's not setting off a phrase. Look at, look at them carefully. What do you think it is, Bill? ... You don't have a yes or a no in that sentence. You're guessing, you're guessing. Now what do you think, Sid? ... Six, because the quotation is what? What is the word quote, the quote there? What is quoted there? ... Stop. That's a quotation. All right, read the next phrase. All right, Simon. ... All right, look at your rules carefully. You have nine of them. Look at them carefully and see why the comma or apostrophe, whatever is in that sentence." ...

Observation #3

"A what? ... All right, what rule is followed? ... What rule is followed? ... What? Michael. ... One? That's what you use with a letter. That's after the greeting of a friendly letter. Next one, read it for us please, Dennis? ... All right, what is used in that? Joanne? ... All right, what is the rule? The rule is what? ... Separating the month and year. Very good, Beth. ... And what is the rule? ... Nine, possession. What is it that belongs to Bill? ... A book. All right." ...

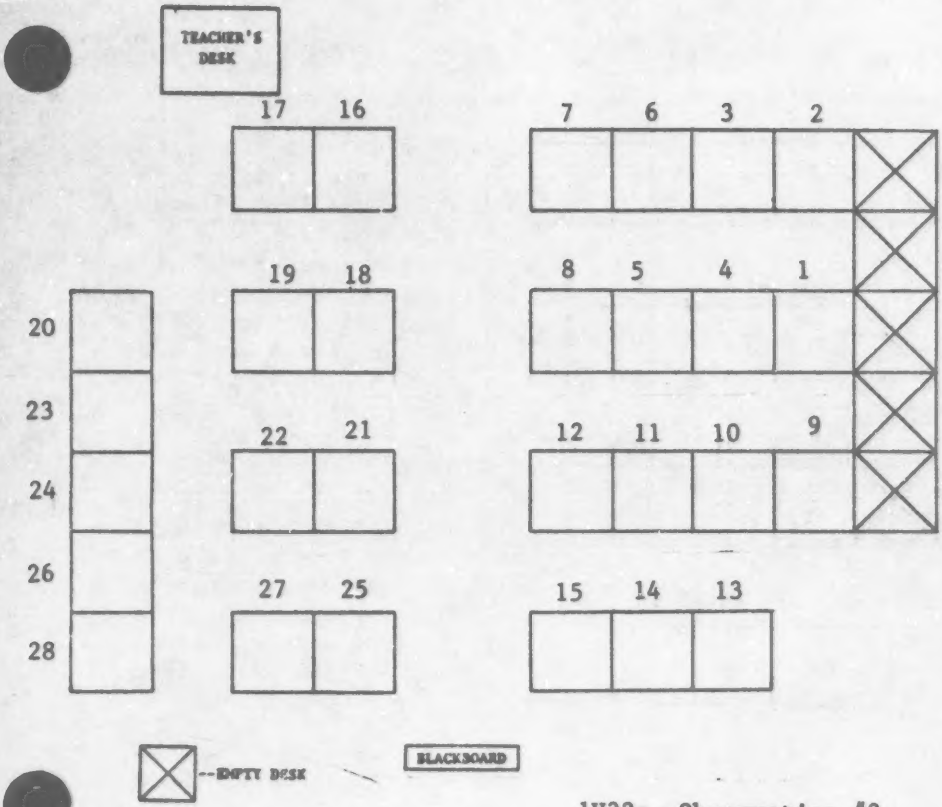
Observation #4

"The certain phrase, after walking four hours. Now the punctuation is missing in the bottom. To do this very, very quickly. #1. You have 2 sentences in each box. Read each one silently. I'll give you a second or two to read #1, box one. Find out which one needs a correction or whatever for the rule. ... Read the two sentences for me, Paul. ... All right, now which one, which part of what do you think is needed? Richard? ... Number what? ... You need a comma after what word? ... After what? ... No." ...

Observation #5

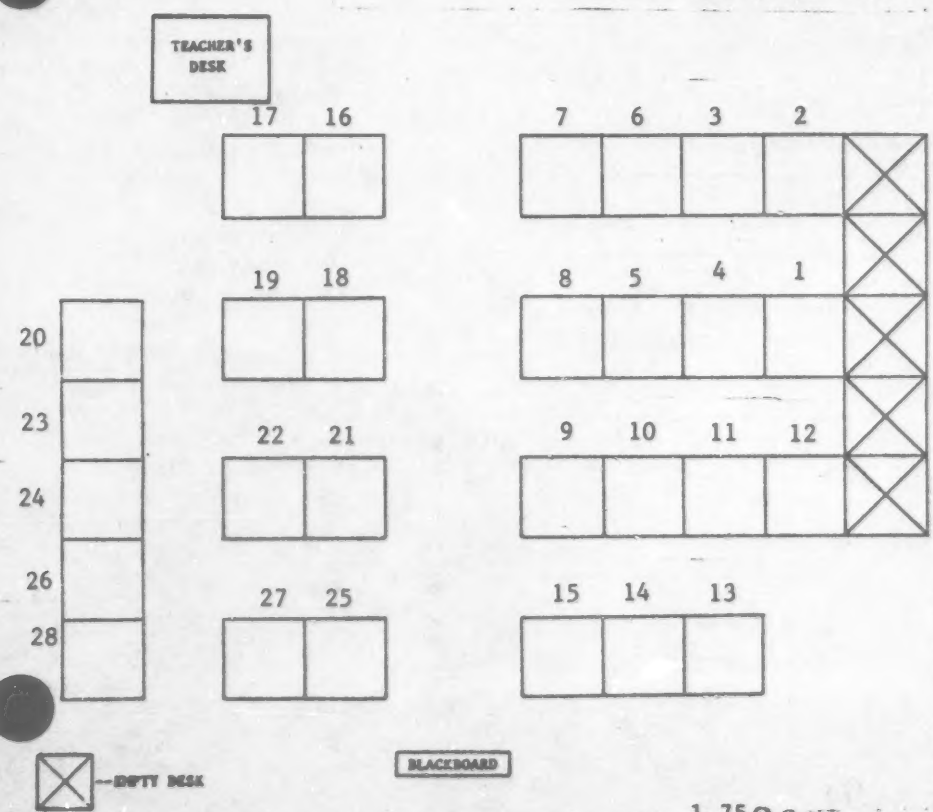
"All right, very good. You should have a comma between? ... Very good. Four, um, what? Heavens! Bernadine, would you read this for us, please? Box four. ... Now, where do you think you need something there? ... #1, very good, you need it where? ... Right, after "Dear Mary." Box 5. All right, Lee. ... All right. ... Ok, #2. What's wrong with 2? ... Look at "can't." ... It's not a comma, it's ah? ... Apostrophe. Ok, good. All right, 6." ...

1V32a--Observation #1



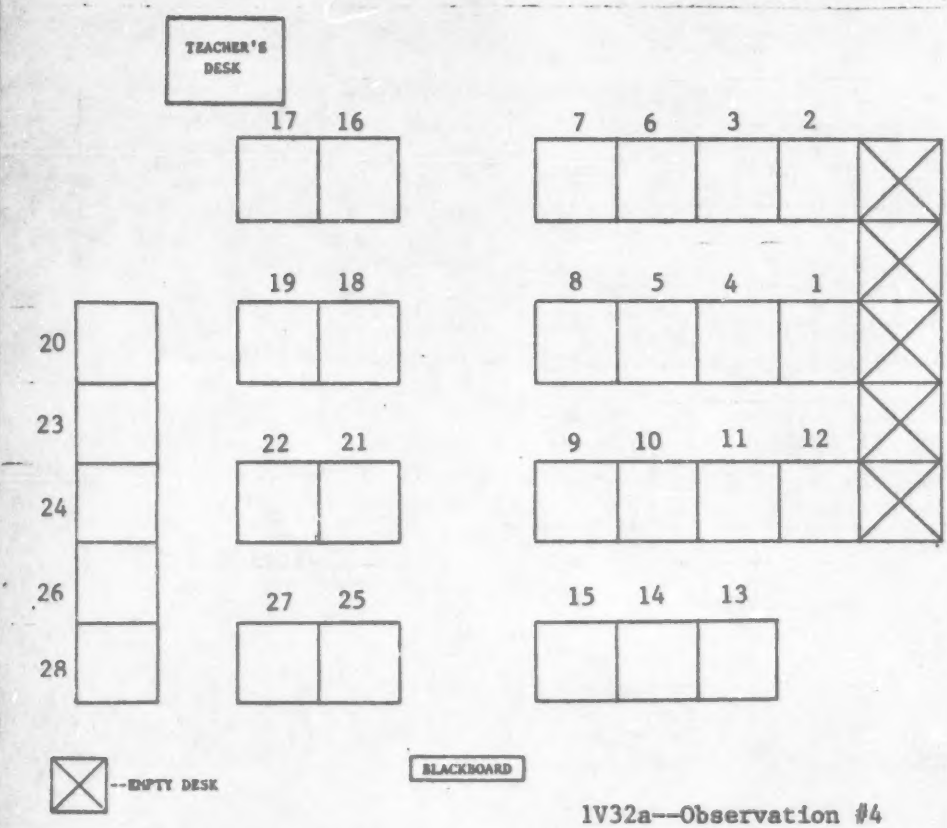
"You know that we have been doing the-ah-punctuation. We did punctuation activity 1 with these skills. Three general rules follow for comma rules and for the use of the comma. Now, if you look in #1, after the salutation of a friendly letter. The salutation is sometimes also called the? ...Greeting. That's rule one. Rule two: to separate words in a series. Excuse me, some of you aren't paying attention. ...You can't pay attention and watch that, too. Number three: to separate month and year, to separate names of city and state." ...

1V32a--Observation #2



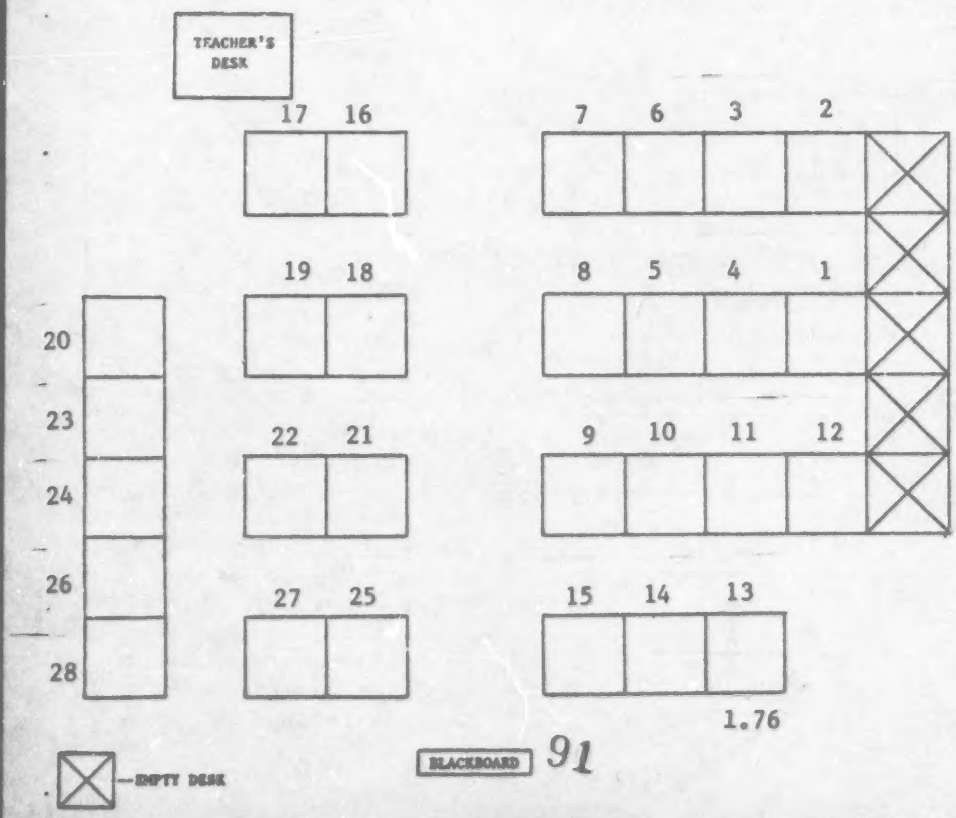
"Which rule would that be? ... Yvette? ... Separate a month and year? ... Tina? ... To set off certain phrases in sentences? It's not setting off a phrase. Look at, look at them carefully. What do you think it is, Bill? ... You don't have a yes or a no in that sentence. You're guessing, you're guessing. Now what do you think, Sid? ... Six, because the quotation is what? What is the word quote, the quote there? What is quoted there? ... Stop. That's a quotation. All right, read the next phrase. All right, Simon. ... All right, look at your rules carefully. You have 9 of them. Look at them carefully and see why the comma or apostrophe, whatever is in that sentence." ...

1V32a--Observation #3



"A what? ... All right, what rule is followed? ... What rule is followed? ... What? Michael. ... One? That's what you use with a letter. That's after the greeting of a friendly letter. Next one, read it for us please, Dennis? ... All right, what is used in that? Joanne? ... All right, what is the rule? The rule is what? ... Separating the month and year. Very good, Beth. ... And what is the rule? ... Nine, possession. What is it that belongs to Bill? ... A book. All right." ...

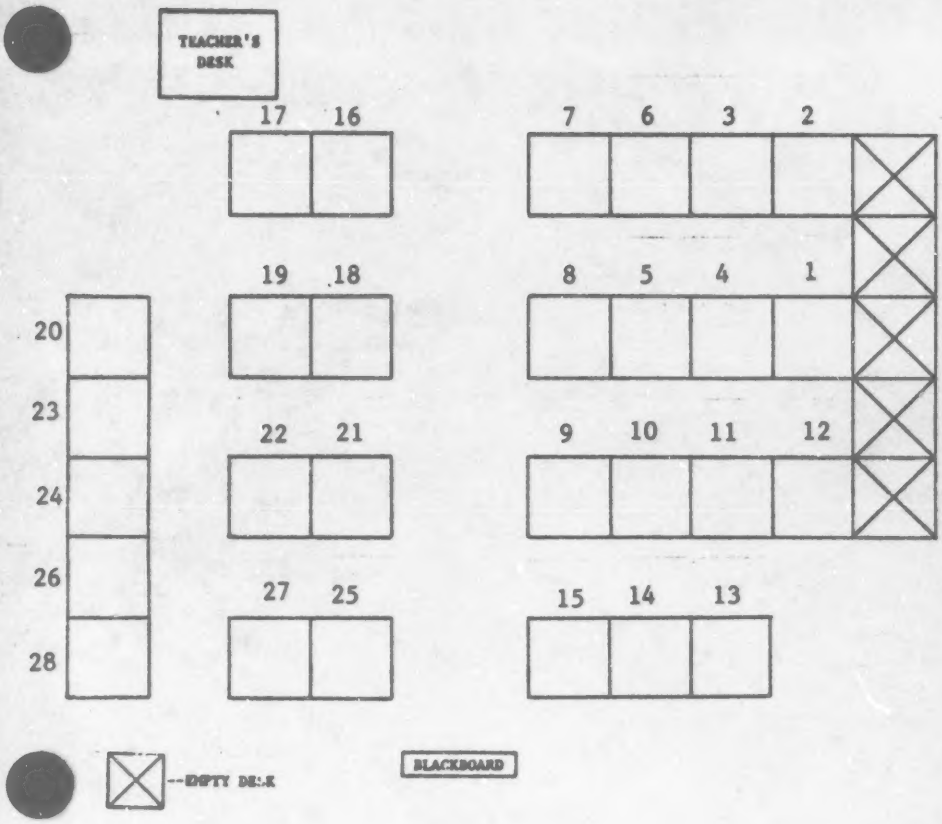
1V32a--Observation #4



"The certain phrase, after walking four hours. Now the punctuation is missing in the bottom. To do this very, very quickly. #1. You have 2 sentences in each box. Read each one silently. I'll give you a second or two to read #1, box one. Find out which one needs a correction or whatever for the rule. ... Read the two sentences for me, Paul. ... All right, now which one, which part of what do you think is needed? Richard? ... Number what? ... You need a comma after what word? ... After what? ... No." ...

1.76

1V32a--Observation #5



"All right, very good. You should have a comma between? ... Very good. Four, um, what? Heavens! Bernadine, would you read this for us, please? Box four. ... Now, where do you think you need something there? ... #1, very good, you need it where? ... Right, after "Dear Mary." Box 5. All right, Lee. ... All right. ... Ok, #2. What's wrong with 2? ... Look at "can't." ... It's not a comma, it's ah? ... Apostrophe. Ok, good. All right, 6." ...

9/11/79

Pre-Observation Form for Classroom B - Grade 3

Teacher *Susan Jones*

Observer

Time Interval *1 minute*

No. of Students Present *16*

Subject *Math*

Observation Date *April 17*

Circle Part of Period: beginning (middle) end

Record number of students assigned to each category during the observation period.

Times	Reading/ Language Arts	Math	Other Subjects Specify:	Pull-Out	Out of Room Specify:
1:05		*16 students assigned to math*			

Pre-Observation Form (cont'd)

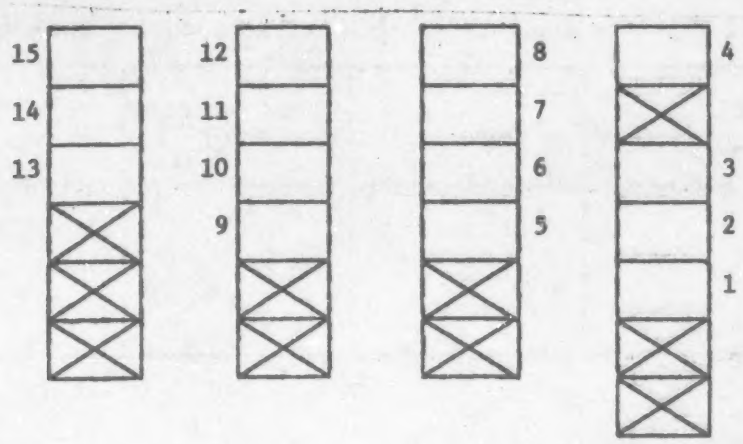
Briefly describe assignments for each subject and free-time activities (attach worksheets if possible).

Math

Students are doing math seatwork and/or math free-time activities. I will be working with students individually at my desk.

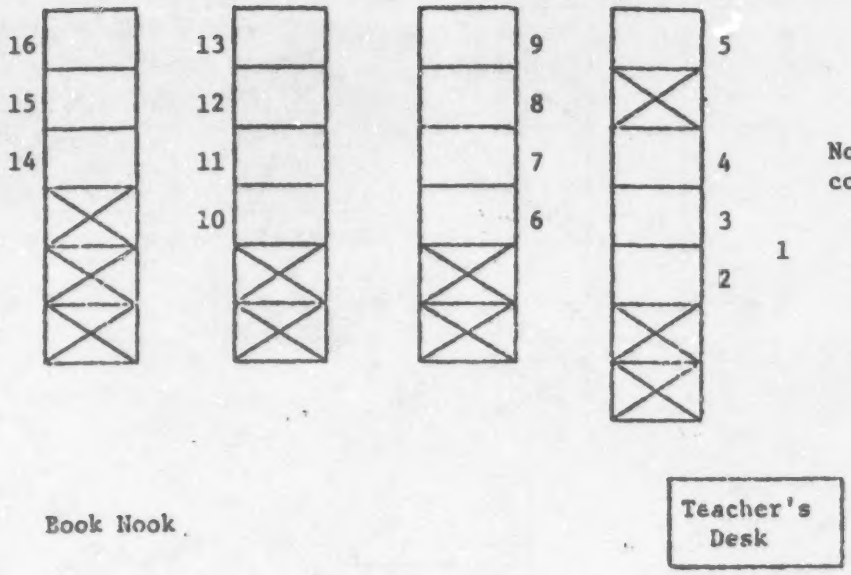
HINTS FOR CODING CLASSROOM B

The classroom's arrangement and the general pattern for coding are shown in the diagram. Students at the teacher's desk are coded first. The second row is scanned in reverse order in observation #5.



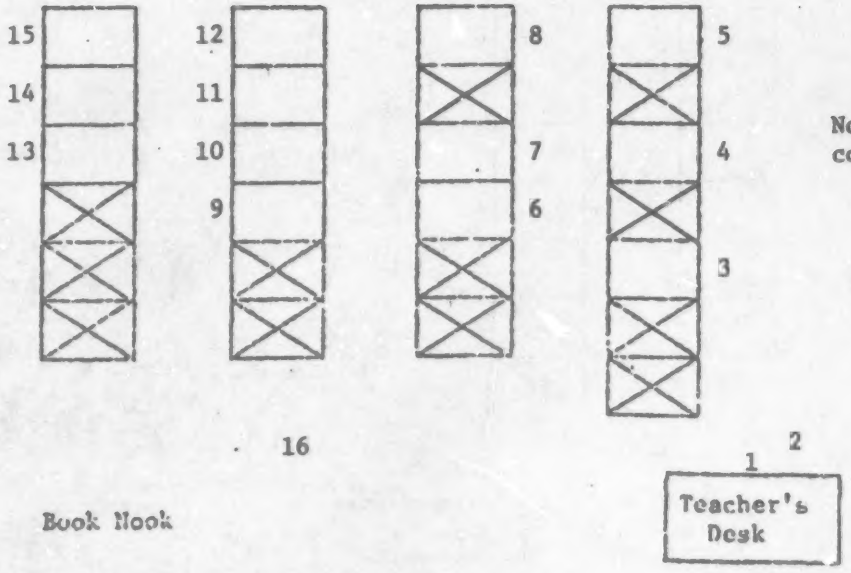
The teacher is working with students individually throughout the observations.

BLANK CLASSROOM DIAGRAMS
1V32b--Observation #1



No pertinent teacher comments.

1V32b--Observation #2

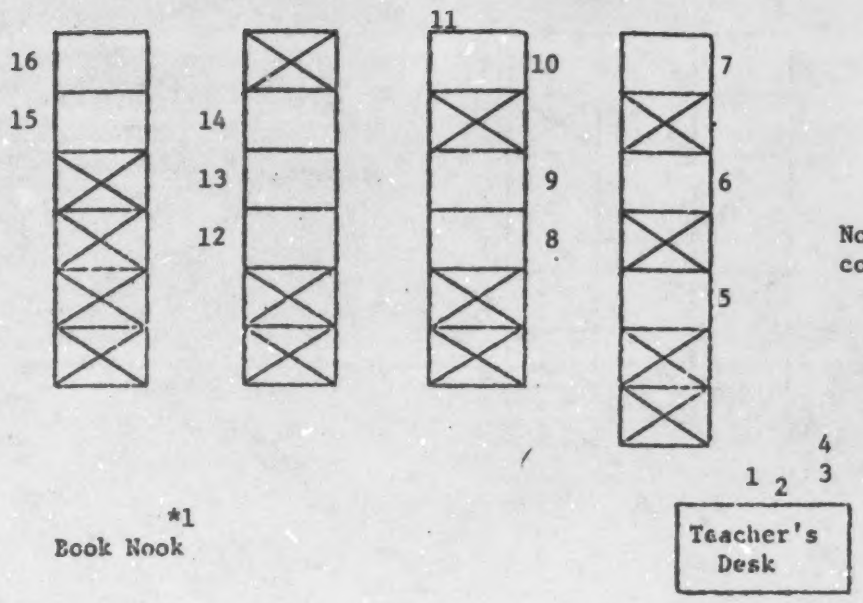


No pertinent teacher comments.

--Empty Desk

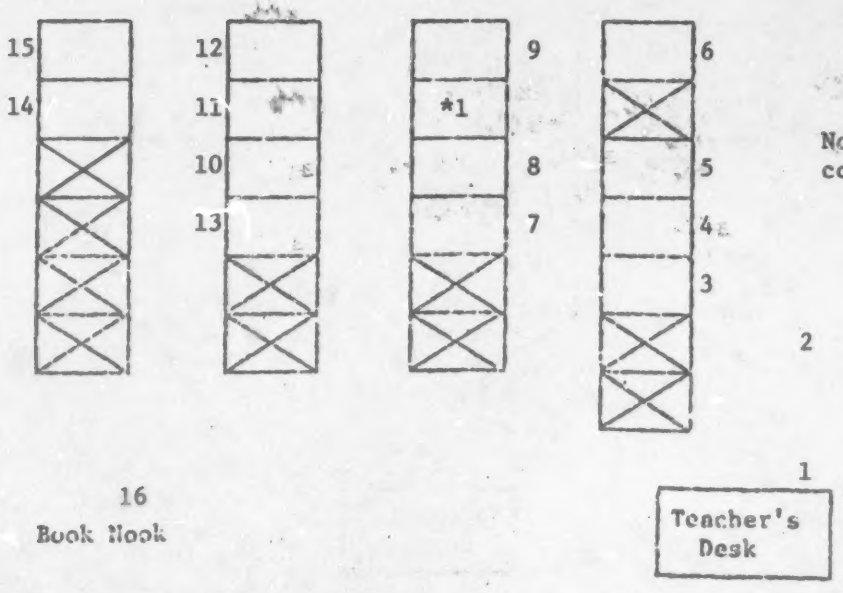
1.80 * --Already counted; do not code

BLANK CLASSROOM DIAGRAMS
1V32b--Observation #3



No pertinent teacher comments.

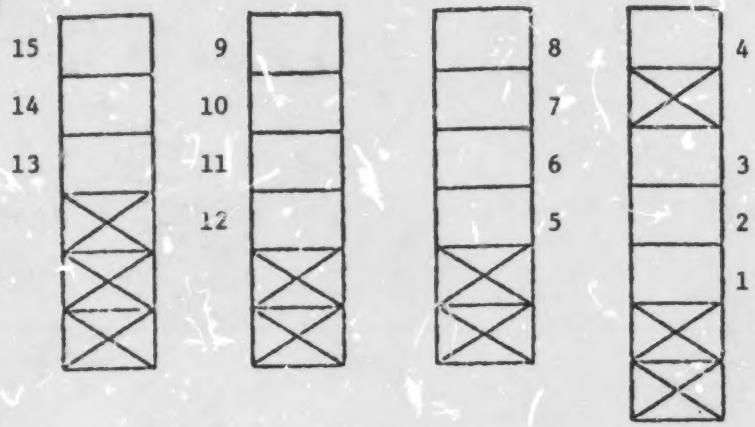
1V32b--Observation #4



No pertinent teacher comments.

--Empty Desk

1.81 * --Already counted; do not code



No pertinent teacher comments.

--Empty Desk

*--Already counted; do not code

8/28/80 1H31k

Pre-Observation Form for Classroom C - Grade 1

Teacher *Rosita Valdez* Subject *Math*

Observer _____ Observation Date *November 19*

Time Interval *2 minutes* Circle Part of Period beginning (middle) end

No. of Students Present *27*

Record number of students assigned to each category during the observation period.

Times	Reading/ Language Arts	Math	Other Subjects Specify:	Pull-Out	Out of Room Specify:
1:13		*2? students assigned to math*			
1:21				*1 student leaves for Title I*	

Pre-Observation Form (cont'd)

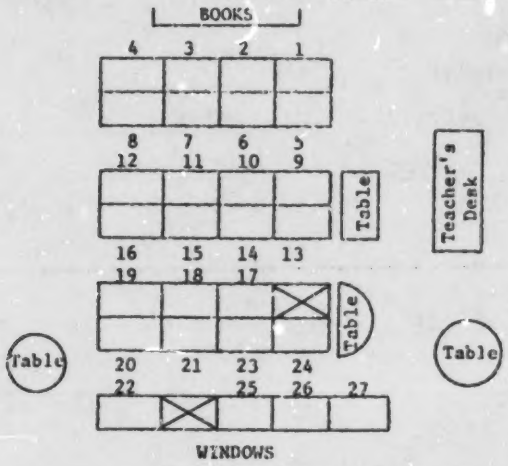
Briefly describe assignments for each subject and free-time activities (attach worksheets if possible).

Math

I will be leading a whole-class lesson on subtraction; workbook sheets have been handed out to students. Several students will be solving problems at the board at first. Then the students will be working independently in their workbooks. I will be circulating to help those students having difficulty.

1.83

HINTS FOR CODING CLASSROOM C



The classroom's arrangement and the general pattern for coding are shown in the diagram. The third row of desks (#13-#16) is coded in reverse order in observation #3, and the fourth row (#17-#19) is coded in reverse order in observations #2-#4. There is one pullout student and one student out of room during the last observation.

The teacher makes the following comments:

Observation #1

"When I see someone sitting especially nice, then I'll know that you are ready for a turn to come up and do a problem. ... I can tell there are a lot of people that aren't going to be ready to come up to the board. ... Ok, maybe Amy can come up and pick a problem and see if she can find the answer to it. Jennifer can also come up and find a problem... (PA announcement) and I think that...Jason can go up and find a problem... and Lisette may find a problem and Tammy may find a problem." ...

Observation #2

"Ok, Eugene, let's take a look at this first problem while we're waiting for the rest of the answers. ... Would you please read it for us? ... How would you read this if you looked at it? ... Sorry, I'm sorry, but I don't appreciate calling out. Eugene... Thank you. Jason, sorry I had trouble hearing it because you were talking. You may sit down... Ok, Eugene, is this the right answer...No...Eugene...Lisa, I'm talking to Eugene. Thank you. Eugene, would you please tell us what you think 5 takeaway 2 equals...7...Nancy said, "No." Nancy, do you know... Excuse me, Tammy, Nancy, do you know what Eugene is doing when he said, "5 takeaway 2 equals 7... He thinks it's plus. Remember, Eugene, this sign means that we start out with five things...circles, ok, Eugene. Let's start out with five...then it tells us to takeaway 2. Ok, you want to come up and takeaway 2? Erase 2 of those circles, so we don't have them anymore." ...

Observation #3

"it should be 2. ... Let's watch, ok, this time we'll have four boxes. Ok, I need Tanya...to come up and take away 3. ... Erase 3 of them...Jason. ... Ok, how many are left? ... 1. 4 takeaway 3 equals what...1, ok. Thank you, Jason. ... Ok... Mark... Why is this answer 3... Ok, sit down, ok... When you take away 0, you're not taking anything away. So 3 takeaway 0 is 3. ... Ok, let's see if pictures can help us. Ok, this time we'll try triangles. Here's 3 of them and it says don't takeaway anything. ... So let me put the eraser down, shouldn't I...equals... Ok, if I put my eraser down and I don't use it how many are left? ... 3 takeaway 3 equals ... 3 takeaway 0 equals 3." ...

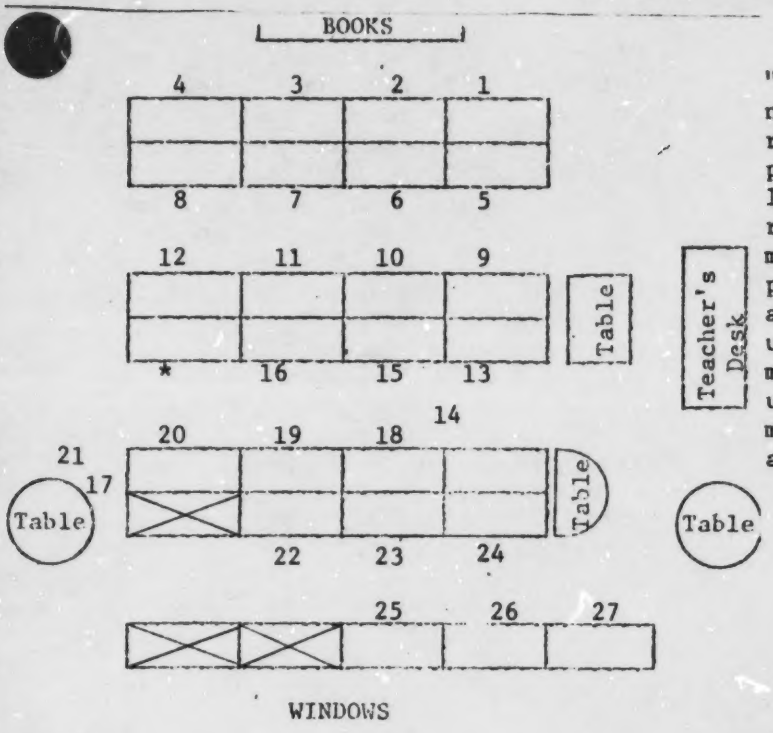
Observation #4

"We're going to do what the problem tells us. Ivory is going to use it. We're starting out with 2 boys... Then it says we're going to take them away. They're going out and play... They don't want to be in here, so let's take both of them away, Ivory... How many are left? ... Nothing, zero, ok, we have a little too much help up here. I don't think we quite need it. Thank you very much, Ivory, ok. Would you believe, please, now, let's see if we can do the same kind of problem by ourselves and let's turn to page 90... Page 90. You'll find on page 90 that we're going to have to...be very careful. ... The book is going to try to trick you. It's going to have some plus problems and some takeaway problems. ... By yourself, very quietly, I'd like you to see if you can do that page. I don't want anyone looking at anyone else's paper." ...

Observation #5

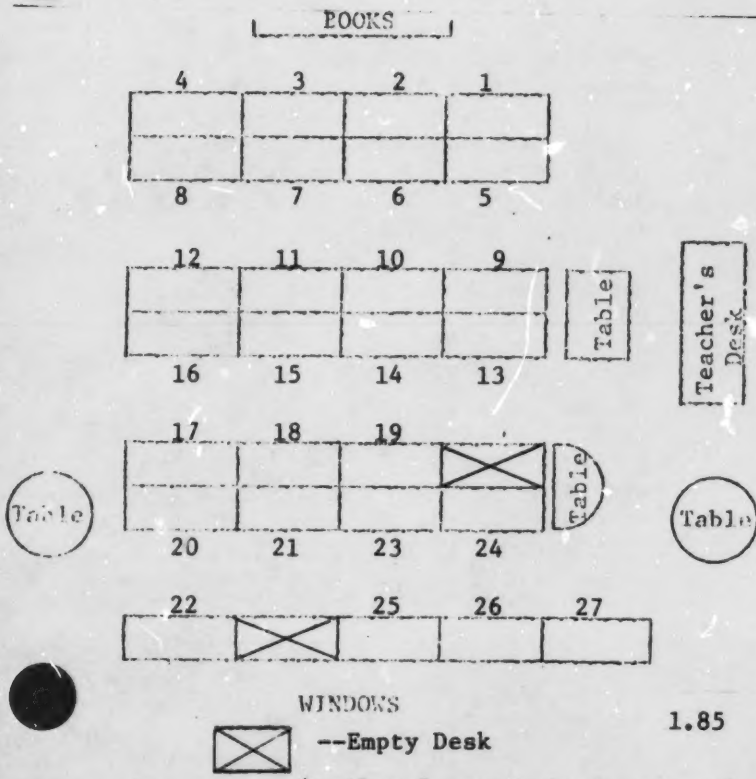
"Sit down... Ok, Jason get busy... Lisa, have you started?... Amy's doing a very nice job..."

BLANK CLASSROOM DIAGRAMS
1V32c--Observation #1



"When I see someone sitting especially nice, then I'll know that you are ready for a turn to come up and do a problem. ... I can tell there are a lot of people that aren't going to be ready to come up to the board. ... Ok, maybe Amy can come up and pick a problem and see if she can find the answer to it. Jennifer can also come up and find a problem...(PA announcement) and I think that...Jason can go up and find a problem...and Lisette may find a problem and Tammy may find a problem." ...

1V32c--Observation #2



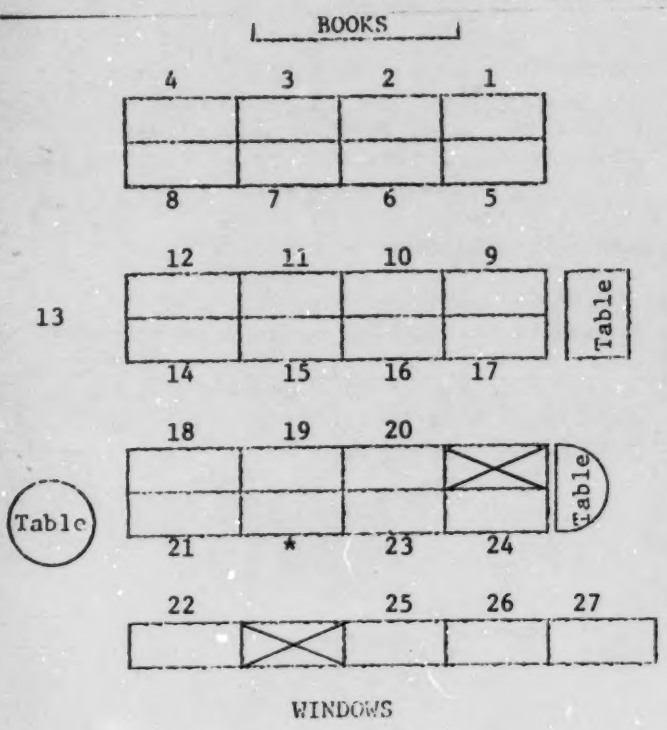
"Ok, Eugene, let's take a look at this first problem while we're waiting for the rest of the answers. ... Would you please read it for us? ... How would you read this if you looked at it? ... Sorry, I'm sorry, but I don't appreciate calling out. Eugene... Thank you. Jason, sorry I had trouble hearing it because you were talking. You may sit down... Ok, Eugene, is this the right answer...No...Eugene...Lisa, I'm talking to Eugene. Thank you. Eugene, would you please tell us what you think 5 takeaway 2 equals...7... Nancy said, "No." Nancy, do you know ...Excuse me, Tammy, Nancy, do you know what Eugene is doing when he said, "5 takeaway 2 equals 7...He thinks it's plus. Remember, Eugene, this sign means that we start out with five things... circles, ok, Eugene. Let's start out with five...then it tells us to takeaway 2. Ok, you want to come up and takeaway 2? Erase 2 of those circles, so we don't have them anymore." ...

1.85

--Empty Desk

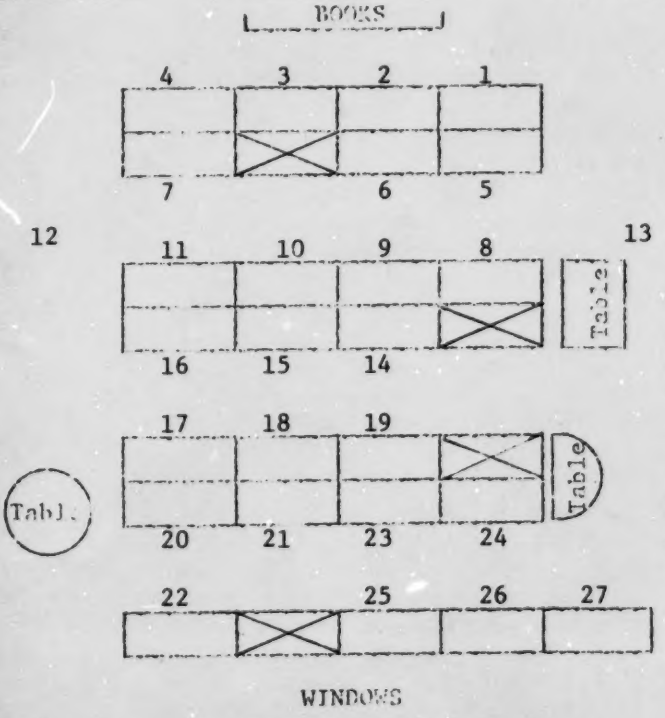
*--Already counted; do not code

BLANK CLASSROOM DIAGRAMS
1V32c--Observation #3



"it should be 2. ... Let's watch, ok, this time we'll have four boxes. Ok, I need Tanya...to come up and take away 3. ... Erase 3 of them...Jason. ... Ok, how many are left? ... 1. 4 takeaway 3 equals what...1, ok. Thank you, Jason. ... Ok...Mark... Why is the answer 3... Ok, sit down, ok... When you take away 0, you're not taking anything away. So 3 takeaway 0 is 3. ... Ok, let's see if pictures can help us. Ok, this time we'll try triangles. Here's 3 of them and it says don't takeaway anything. ... So let me put the eraser down, shouldn't I...equals... Ok, if I put my eraser down and I don't use it how many are left? ... 3 takeaway 3 equals ... 3 take-away 0 equals 3." ...

1V32c--Observation #4

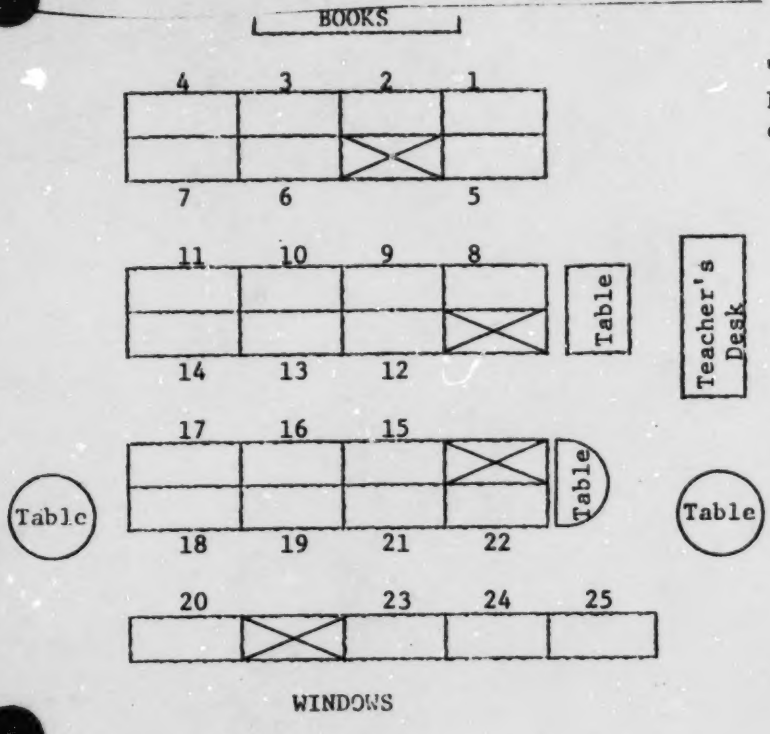


"We're going to do what the problem tells us. Ivory is going to do it. We're starting out with 2 boys... Then it says we're going to take them away. They're going out and play... They don't want to be in here, so let's take both of them away, Ivory... How many are left? ... Nothing, zero, ok, we have a little too much help up here. I don't think we quite need it. Thank you very much, Ivory, ok. Would you believe, please, now, let's see if we can do the same kind of problem by ourselves and let's turn to page 90... Page 90. You'll find on page 90 that we're going to have to... be very careful. ... The book is going to try to trick you. It's going to have some plus problems and some takeaway problems. ... By yourself, very quietly, I'd like you to see if you can do that page. I don't want anyone looking at anyone else's paper." ...

--Empty Desk

*--Already counted; do not code

BLANK CLASSROOM DIAGRAMS
1V32c--Observation #5
(1 pullout; 1 student out of room)



"Sit down... Ok, Jason get busy... Lisa, have you started?... Amy's doing a very nice job..."

⊠ --Empty Desk

*Already counted; do not code

Pre-Observation Form for 1V33 - Grade 1

Teacher *Ann Smith* Subject *Math*

Observer _____ Observation Date *April 16*

Time Interval *1 minute* Circle Part of Period (beginning) middle end

No. of Students Present *20*

Record number of students assigned to each category during the observation period.

Times	Reading/ Language Arts	Math	Other Subjects Specify:	Pull-Out	Out of Room Specify:
12:30		*20 students assigned to math*			

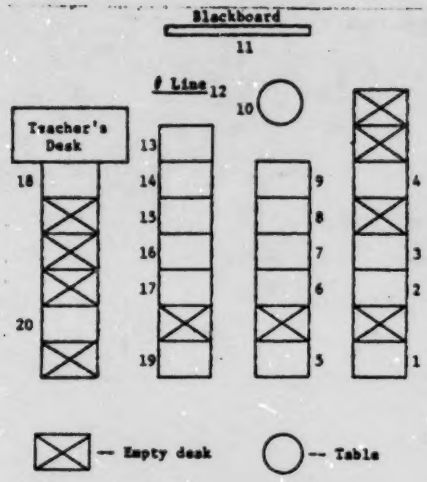
Pre-Observation Form (cont'd)

Briefly describe assignments for each subject and free-time activities (attach worksheets if possible).

Math

I will be teaching a whole-group lesson on counting by twos. Most students will be counting beans at their desks. Three students will be at the front of the room--walking on a number line, writing on the board, and using demonstration materials.

HINTS FOR CODING 1V33



The classroom's arrangement and the general pattern for coding are shown.

The teacher makes the following comments:

Observation #1
The teacher is presenting academic information.

Observation #2
"He started at 0, and he went over to 2, ok, and he stopped at 2. Now, can you take 2 more steps? Where are you going stop this time, Kenneth? ... 4. All right. So put another set of 2, everybody, 4. How about 2 more steps? Now where are you? ... 6. Ok, 2 more. ... Up to 8. Do you have your sets of 8 out? You should have 2,4, 6,8. Ok. Keep them in sets of 2, keep them in sets of 2. Let's keep them so they're in sets of 2. All right. Just like Shaun's doing. See how he has his in sets? Oh, you can't see them. I'm going to have to change those. So you can see them in sets of 2. You have the right number, dear, but let's fix them so that you see them in sets of 2. Ok? ... No, you should have 8. Let's get 2 more. Everybody have 8 now?"...

Observation #3
The teacher is presenting academic information.

Observation #4
"You point to each set of 2. Now how about coming back here and as they count in 2s, you are going to walk in 2s. All right, ready, 2,4,6,8,10,12. I didn't say put them all out again, just leave them out like they were, and point to the sets of 2 as we count them. We're going to have to do it again. Everybody have their sets of 2s out? ... Ok, let's leave them like you had them before, David. Ready, go. 2, ... Wait a minute, wait a minute, Kenny's not ready. Come back and jump for us again."

Observation #5
"All right, ready. 2,4,6. Are you counting along? 12. All right, you want to try it again? Kenny? And everybody, let's watch him and let's go and point to your own sets of 2. You ready, Kenny? 2,4,6,8,10,12. ... Woop, we're going to have to keep doing it here, everybody's not doing it yet. Get your 2s out and point. Maybe this time it will be more fun if you put your fingers on the two of them. Put your 2 fingers on them like this. Go on that way. Some of you have been doing it all along. Ok?"

TEACHER COMMENTS FOR 1V33--CONTINUED

Observation #6

"Maybe it will be more appropriate if you will put your two fingers on them like this, like you have been doing it all along. Let's try it again. Ready - 2, 4, 6, 8, 10, 12. Does anybody know what would come next? ... We're counting by 2s. ... No, that would be counting by 1s; it's one higher. Kenny? ... 14? ... All right. You want to jump to 14 for us? What's going to come after 14 if we're counting by 2s? Maryanna ... 16. All right, who can guess what's going to come next? Judy... 18. What will come next, Richard?" ...

Observation #7

"No, that's counting by 1s again. 20. All right. Does anybody think they know what's going to come after 20? What's it, Richard? ... 22. What's going to come after that? Jeff ... 24. Mike, do you know what's going to be next? ... 26. What's going to be next? ... What's going to be next? ... 28, what's next? ... No, that's by 1s again. No, 30. ... What's going to come after 30? ... No, that's by 1s again." ...

Observation #8

"32...34... No, that's by 1s again...36... No, that's by 1s. 38, ok. What comes after 38? ... 40. All right, let's all start with zero and go all the way up. Count with us here even though you're only counting to 16. Ready. All right, you can go counting up to 12, Shawn, you'll point to 12. Ready, 0, 2. Everybody start with zero. 0, 2, 4, 6, 8, ... Uh, uh, uh, 10." ...

Observation #9

"12, 14, 16, keep going, 18, 20. All right, very good. You people may go back to your seats. Let's look at the page where at the top you'll see the Indian feather. It says "How Many?" How many? On the first Indian band, how many feathers, David? ... So write your 2 underneath. See if you can fill in all the Indian feathers counting by 2s."

1V32 consists of three videotape clips of three classrooms. Each clip provides five scans of each classroom for coding on the blank classroom diagrams (1H31) or on the Engagement Rate Form.

1V33 consists of one videotape clip including ten scans of a single classroom for use in practicing coding.

Key for 1V32a

STATE _____
DISTRICT _____
SCHOOL _____
TEACHER Green
CODER _____

ENGAGEMENT RATE FORM

STATE # 03 SCHOOL # 10 DATE 11-14 GRADE 4

DISTRICT # 47 TEACHER # ___ CODER # ___ # STUDENTS PRESENT 28

PART OF CLASS OBSERVED: Beg. ✓ Mid. ___ End ___

		1	2	3	4	5	6	7	8	9
	TIME	1:45	1:47	1:49	1:51	1:53				
READING/LANGUAGE ARTS	ASSIGNED	28	28	28	28	28				
	MANAGEMENT/ TRANSITION	9-13			0-2					
	SOCIALIZING	0-2								
	DISCIPLINE	1-7								
	UNOCCUPIED/ OBSERVING	1-8	0-3	0-9	0-4	2-8				
	OUT OF ROOM									
	TOTAL UNENGAGED	13-26	0-3	0-9	0-6	2-8				
	ENGAGED	0-17	23-28	15-28	20-28	18-28				
MATHEMATICS	ASSIGNED									
	MANAGEMENT/ TRANSITION									
	SOCIALIZING									
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING									
	OUT OF ROOM									
	TOTAL UNENGAGED									
	ENGAGED									
	OTHER ASSIGNED									
	PULL OUT ASSIGNED									
	NO. OF STUDENTS PRESENT									

1T34b

Key for 1V32a

	TIME	10	11	12	13	14	15	TOTAL	ENGAGEMENT RATE
READING/LANGUAGE ARTS	ASSIGNED							140	ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION							9-14	
	SOCIALIZING							0-2	
	DISCIPLINE							1-7	69 - 89%
	UNOCCUPIED/ OBSERVING							3-28	
	OUT OF ROOM								
	TOTAL UNENGAGED							15-47	
	ENGAGED							96-125	
MATHEMATICS	ASSIGNED								ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION								
	SOCIALIZING								
	DISCIPLINE								
	UNOCCUPIED/ OBSERVING								
	OUT OF ROOM								
	TOTAL UNENGAGED								
	ENGAGED								
	OTHER ASSIGNED								
	PULL OUT ASSIGNED								
	# STUDENTS PRESENT								

KEY FOR 1V32b

STATE _____
DISTRICT _____
SCHOOL _____
TEACHER Jones
CODER _____

ENGAGEMENT RATE FORM

STATE # 03 SCHOOL # 08 DATE 4-17 GRADE 3

DISTRICT # 47 TEACHER # ___ CODER # ___ # STUDENTS PRESENT 16

PART OF CLASS OBSERVED
Beg. ___
Mid. X
End ___

	TIME	1	2	3	4	5	6	7	8	9
		1:05	1:06	1:07	1:08	1:09				
READING/LANGUAGE ARTS	ASSIGNED									
	MANAGEMENT/ TRANSITION									
	SOCIALIZING									
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING									
	OUT OF ROOM									
	TOTAL UNENGAGED									
	ENGAGED									
MATHEMATICS	ASSIGNED	16	16	16	16	16				
	MANAGEMENT/ TRANSITION	1	2-4	1-4	1-3	0-1				
	SOCIALIZING	0-2			0-1					
	DISCIPLINE			4-7						
	UNOCCUPIED/ OBSERVING	0-4	4	0-2	2-5	1-4				
	OUT OF ROOM									
	TOTAL UNENGAGED	1-6	6-8	8-10	4-7	1-5				
	ENGAGED	8-16	6-12	4-9	7-14	9-16				
	OTHER ASSIGNED									
	PULL OUT ASSIGNED									
	NO. OF STUDENTS PRESENT									

Key for 1V32b

	TIME	10	11	12	13	14	15	TOTAL	ENGAGEMENT RATE
READING/LANGUAGE ARTS	ASSIGNED								ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION								
	SOCIALIZING								
	DISCIPLINE								
	UNOCCUPIED/ OBSERVING								
	OUT OF ROOM								
	TOTAL UNENGAGED								
	ENGAGED								
MATHEMATICS	ASSIGNED							80	ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION							5-13	
	SOCIALIZING							0-3	
	DISCIPLINE							4-7	55-74%
	UNOCCUPIED/ OBSERVING							7-19	
	OUT OF ROOM								
	TOTAL UNENGAGED							20-36	
	ENGAGED							44-59	
	OTHER ASSIGNED								
	PULL OUT ASSIGNED								
	# STUDENTS PRESENT								

KEY FOR 1V32c

STATE _____
DISTRICT _____
SCHOOL _____
TEACHER Valdez
CODER _____

ENGAGEMENT RATE FORM

STATE # 03 SCHOOL # 12 DATE 11-19 GRADE 1

DISTRICT # 47 TEACHER # ___ CODER # ___ # STUDENTS PRESENT 27

PART OF CLASS OBSERVED: Beg. ___ Mid. ✓ End ___

	TIME	1	2	3	4	5	6	7	8	9
		1:13	1:15	1:17	1:19	1:21				
READING/LANGUAGE ARTS	ASSIGNED									
	MANAGEMENT/ TRANSITION									
	SOCIALIZING									
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING									
	OUT OF ROOM									
	TOTAL UNENGAGED									
	ENGAGED									
MATHEMATICS	ASSIGNED	27	27	27	27	26				
	MANAGEMENT/ TRANSITION	19-21	1-4	0-1	11-15	1-4				
	SOCIALIZING					1-5				
	DISCIPLINE		5-7							
	UNOCCUPIED/ OBSERVING	2-3	1-5	3-9	1-3	7-13				
	OUT OF ROOM					1				
	TOTAL UNENGAGED	22	7-16	3-10	12-17	10-20				
	ENGAGED	3-7	9-22	15-26	8-17	4-18				
	OTHER ASSIGNED									
	PULL OUT ASSIGNED					1				
	NO. OF STUDENTS PRESENT									

6/19/80

1T34f

Key for 1V32c

	TIME	10	11	12	13	14	15	TOTAL	ENGAGEMENT RATE
READING/LANGUAGE ARTS	ASSIGNED								ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION								
	SOCIALIZING								
	DISCIPLINE								
	UNOCCUPIED/ OBSERVING								
	OUT OF ROOM								
	TOTAL UNENGAGED								
	ENGAGED								
MATHEMATICS	ASSIGNED							134	ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION							29-41	
	SOCIALIZING							1-5	
	DISCIPLINE							5-6	44-63%
	UNOCCUPIED/ OBSERVING							16-37	
	OUT OF ROOM							1	
	TOTAL UNENGAGED							55-85	
	ENGAGED							59-85	
	OTHER ASSIGNED								
	PULL OUT ASSIGNED							1	
	# STUDENTS PRESENT								

KEY FOR 1V33

(First Five Observations Only)

STATE _____
DISTRICT _____
SCHOOL _____
TEACHER Smith
CODER _____

ENGAGEMENT RATE FORM

STATE # 03 SCHOOL # 08 DATE 4-16 GRADE 1

DISTRICT # 47 TEACHER # ___ CODER # ___ # STUDENTS PRESENT 20

PART OF CLASS OBSERVED Beg. ✓ Mid. ___ End ___

	TIME	1	2	3	4	5	6	7	8	9
		12:30	12:31	12:32	12:33	12:34				
READING/LANGUAGE ARTS	ASSIGNED									
	MANAGEMENT/ TRANSITION									
	SOCIALIZING									
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING									
	OUT OF ROOM									
	TOTAL UNENGAGED									
	ENGAGED									
MATHEMATICS	ASSIGNED	20	20	20	20	20				
	MANAGEMENT/ TRANSITION	0-1				0-1				
	SOCIALIZING									
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING	0-4	1-3	0-2	2-6	2-4				
	OUT OF ROOM									
	TOTAL UNENGAGED	0-5	1-3	0-2	2-6	2-5				
	ENGAGED	13-20	15-20	16-20	12-20	13-20				
	OTHER ASSIGNED									
	PULL OUT ASSIGNED									
	NO. OF STUDENTS PRESENT									

4/14/80

Key for 1V33
(First Five Observations)

	TIME	10	11	12	13	14	15	TOTAL	ENGAGEMENT RATE
READING/LANGUAGE ARTS	ASSIGNED								ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION								
	SOCIALIZING								
	DISCIPLINE								
	UNOCCUPIED/ OBSERVING								
	OUT OF ROOM								
	TOTAL UNENGAGED								
	ENGAGED								
MATHEMATICS	ASSIGNED							100	ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION							0-2	
	SOCIALIZING								
	DISCIPLINE								79-95%
	UNOCCUPIED/ OBSERVING							5-19	
	OUT OF ROOM								
	TOTAL UNENGAGED							5-21	
	ENGAGED							79-95	
	OTHER ASSIGNED								
	PULL OUT ASSIGNED								
	# STUDENTS PRESENT								

KEY FOR 1V33

(Last Four Observations)

STATE _____
DISTRICT _____
SCHOOL _____
TEACHER Smith
CODER _____

ENGAGEMENT RATE FORM

STATE # 03 SCHOOL # 08 DATE 4-16 GRADE 1

DISTRICT # 47 TEACHER # ___ CODER # ___ # STUDENTS PRESENT 20

PART OF CLASS OBSERVED
Beg. ✓
Mid. ___
End ___

	TIME	1	2	3	4	5	6	7	8	9
							12:35	12:36	12:37	12:38
READING/LANGUAGE ARTS	ASSIGNED									
	MANAGEMENT/ TRANSITION									
	SOCIALIZING									
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING									
	OUT OF ROOM									
	TOTAL UNENGAGED									
	ENGAGED									
MATHEMATICS	ASSIGNED						20	20	20	20
	MANAGEMENT/ TRANSITION								0-9	2
	SOCIALIZING						0-1			
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING						0-5	0-5	0-5	2-4
	OUT OF ROOM								1	
	TOTAL UNENGAGED						1-5	0-5	1-14	4-6
	ENGAGED						13-20	13-20	4-20	12-18
	OTHER ASSIGNED									
	PULL OUT ASSIGNED									
	NO. OF STUDENTS PRESENT									

6/19/80

1T34j

Key for 1V33
(Last Four Observations)

	TIME	10	11	12	13	14	15	TOTAL	ENGAGEMENT RATE
READING/LANGUAGE ARTS	ASSIGNED								ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION								
	SOCIALIZING								
	DISCIPLINE								
	UNOCCUPIED/ OBSERVING								
	OUT OF ROOM								
	TOTAL UNENGAGED								
	ENGAGED								
MATHEMATICS	ASSIGNED							80	ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION							2	
	SOCIALIZING							0-1	
	DISCIPLINE							0	63-93%
	UNOCCUPIED/ OBSERVING							2-20	
	OUT OF ROOM							1	
	TOTAL UNENGAGED							6-23	
	ENGAGED							50-74	
	OTHER ASSIGNED								
	PULL OUT ASSIGNED								
	# STUDENTS PRESENT								

NOTES

E.1. Videotapes of Three Classrooms

The following pages include answer keys for videotape segments of three classrooms. These keys provide the correct categorization for each student for each observation.

Each answer key includes the number of students present; a diagram showing the order of coding, location, and classification of each student; and the reasons for classification of all unengaged students. Students out of the room are also indicated. The location of each student is shown by a number and a letter; the number indicates the sequence in which students are coded, while the letter(s) indicates the behavior category. For example, on observation #1 for classroom A, student 1U is the first student coded; he is located in the desk nearest the camera in the first row and is coded as unoccupied/observing, since he is looking out the window. The behavior codes are as follows:

E -- Engaged
M -- Management/Transition
S -- Socializing
D -- Discipline
U -- Unoccupied/Observing
Ao -- Assigned Other

The specific behavior of each unengaged student is described for each observation. Where the categorization of a student may vary, this is indicated by a slash. Thus, student 7E/U is the seventh student coded, and he/she may be coded as either engaged or unoccupied/observing. This may happen if the student changes behaviors during the time an observation can be made.

Two symbols are used on the pictures to help observers:

Empty desk

* Student has already been coded but has moved; do not code again (e.g., *8 -- this was the eighth student coded; although he/she appears on screen again, skip him/her)

Note: Adding the minimums or maximums for the individual unengaged categories in an observation does not always yield the minimum or maximum for the total number of unengaged students, since some students may be coded in one of two or three unengaged categories (e.g., M/U).

Three dots (...) in the teacher comments indicate either a student response or comments made by the teacher and students between scans of the classroom.

TEACHER COMMENTS FOR 1V32a

"Put your name on all pages... Now, I don't have to explain this, because you have--"

Observation #1

"You know that we have been doing the-ah-punctuation. We did punctuation activity 1 with these skills. Three general rules follow for comma rules and for the use of the comma. Now, if you look in #1, after the salutation of a friendly letter. The salutation is sometimes also called the? . . . Greeting. That's rule one. Rule two: to separate words in a series. Excuse me, some of you aren't paying attention. ...You can't pay attention and watch that, too. Number three: to separate month and year, to separate names of city and state, to set off yes and no, to separate a quotation from the rest of the sentence. You have apostrophe rules; you have two of them. I want you to read silently, "What to Do." You'll put the number of the rule next to the example below. Look at your eight, nine, rules. Look at them carefully. Look at your nine "What to Do." All right, what is the first thing over there? Under "What to Do." What is the first thing you see? Virjann? ... All right, all right, Oakland, California. Look at your nine rules. Which rule would? Christine? ... Very good, #4. All right, read the next one. Raymond?"...

Observation #2

"Which rule would that be? ... Yvette? ... Separate a month and year? ... Tina? ... To set off certain phrases in sentences? It's not setting off a phrase. Look at, look at them carefully. What do you think it is, Bill? ... You don't have a yes or a no in that sentence. You're guessing, you're guessing. Now what do you think, Sid? ... Six, because the quotation is what? What is the word quote, the quote there? What is quoted there? ... Stop. That's a quotation. All right, read the next phrase. All right, Simon. ... All right, look at your rules carefully. You have nine of them. Look at them carefully and see why the comma or apostrophe, whatever is in that sentence. Terrance? ... Is that a? Where, where is the comma in that? Is there a comma in that? ... What is in that? Laurie? ... It's a contraction. That is an apostrophe and not a comma. See that? Ok, it's number what? ... #8. All right, read the next one, James. ... Read it, read it first. ... You weren't paying attention. ... All right, what is in there? A comma or an apostrophe?" ...

TEACHER COMMENTS FOR 1V32a--CONTINUED

Observation #3

"A what? ... All right, what rule is followed? ... What rule is followed? ... What? Michael. ... One? That's what you use with a letter. That's after the greeting of a friendly letter. Next one, read it for us please, Dennis? ... All right, what is used in that? Joanne? ... All right, what is the rule? The rule is what? ... Separating the month and year. Very good, Beth. ... And what is the rule? ... Nine, possession. What is it that belongs to Bill? ... A book. All right, next one, Mark M. ... What rule? ... I didn't hear you. ... To separate the names of city and state? ... All right, what should it? Or what do you think it is, Richard? ... All right, Lee? ... Two, very good. It's a list. We have three different things there. All right, now read the next, Vanetta. ... Number what? ... Five, that's right, to set off yes and no. And the last one? Jeannette? ... Very good."

Observation #4

"The certain phrase, after walking four hours. Now the punctuation is missing in the bottom. To do this very, very quickly. #1. You have 2 sentences in each box. Read each one silently. I'll give you a second or two to read #1, box one. Find out which one needs a correction or whatever for the rule. ... Read the two sentences for me, Paul. ... All right, now which one, which part of what do you think is needed? Richard? ... Number what? ... You need a comma after what word? ... After what? ... No. Joe B., #3. All right, look at box 2. Read the sentences in box 2 for us, Greg. ... The what? ... All right, what, which one? Which number? Think about your nine rules that we've been studying. All right, Christine, do you want help? ... Christine, all right, you need a comma where? ... Right, to separate the city and state. Read box, all right, 3. Tonio? ... Think about it. Say that again. ... All right, Bill, three." ...

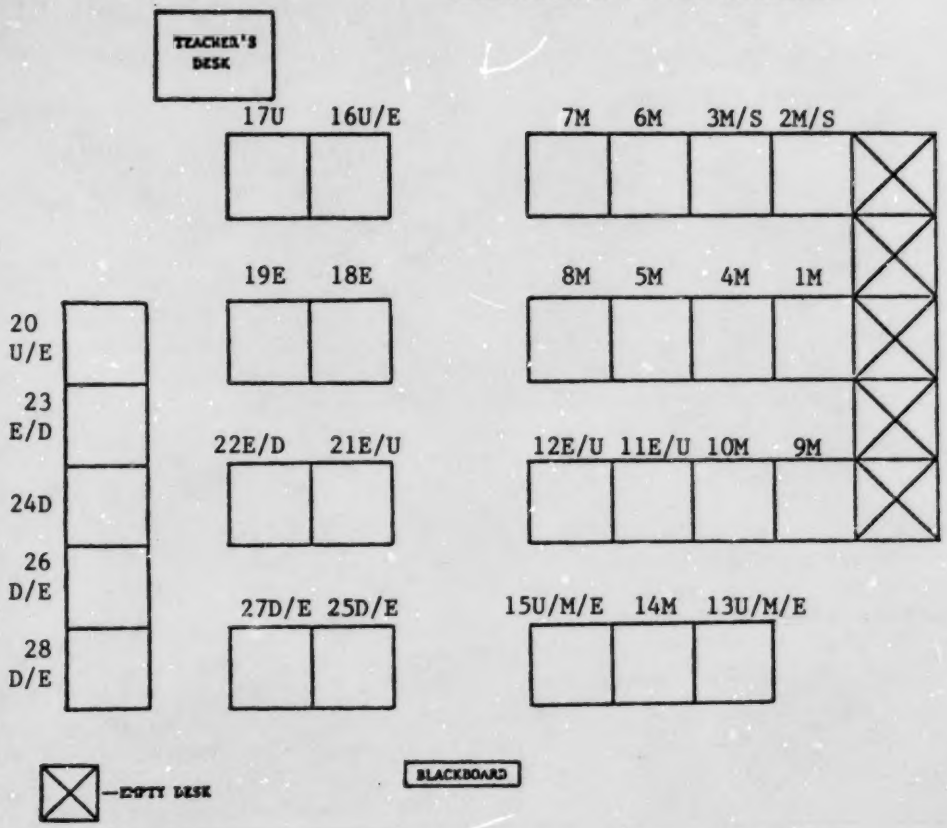
Observation #5

"All right, very good. You should have a comma between? ... Very good. Four, um, what? Heavens! Bernadine, would you read this for us, please? Box four. ... Now, where do you think you need something there? ... #1, very good, you need it where? ... Right, after "Dear Mary." Box 5. All right, Lee. ... All right. ... Ok, #2. What's wrong with 2? ... Look at "can't." ... It's not a comma, it's ah? ... Apostrophe. Ok, good. All right, 6. ... Ah, Nathaniel, would you read 6? ... Very good. All right, box 7."

E.1.--Continued

ANSWER KEY FOR 1V32a

Observation #1--28 students



1M, 4M, 5M, 6M,
7M, 8M, 9M, 10M--Writing names on several sheets of paper

2M/S, 3M/S--Writing name on several sheets of paper or hitting each other

11E/U--Looking at paper or looking around

12U/E--Looking around or looking at paper

13U/M/E--Looking at camera, putting name on papers, or looking at paper

14M--Putting name on papers

15 U/M/E--Looking at camera, putting name on paper, or looking at paper

16U/E--Looking around or looking at the teacher

17U--Looking at camera

20U/E--Looking at camera or responding appropriately

21E/U--Looking at paper or looking at camera

22E/D, 23E/D, 25F/D, 27E/D--Listening to student being disciplined or looking at paper

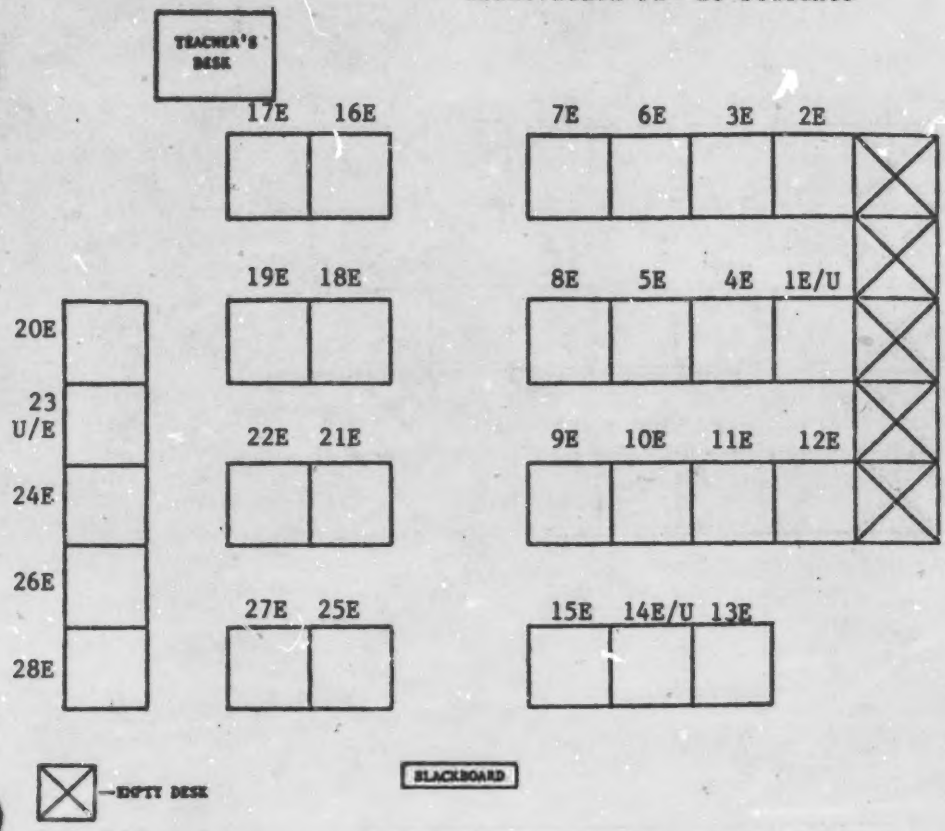
24D--Being disciplined

26D/E, 28D/E--Listening to student being disciplined or looking at paper

E.1.--Continued

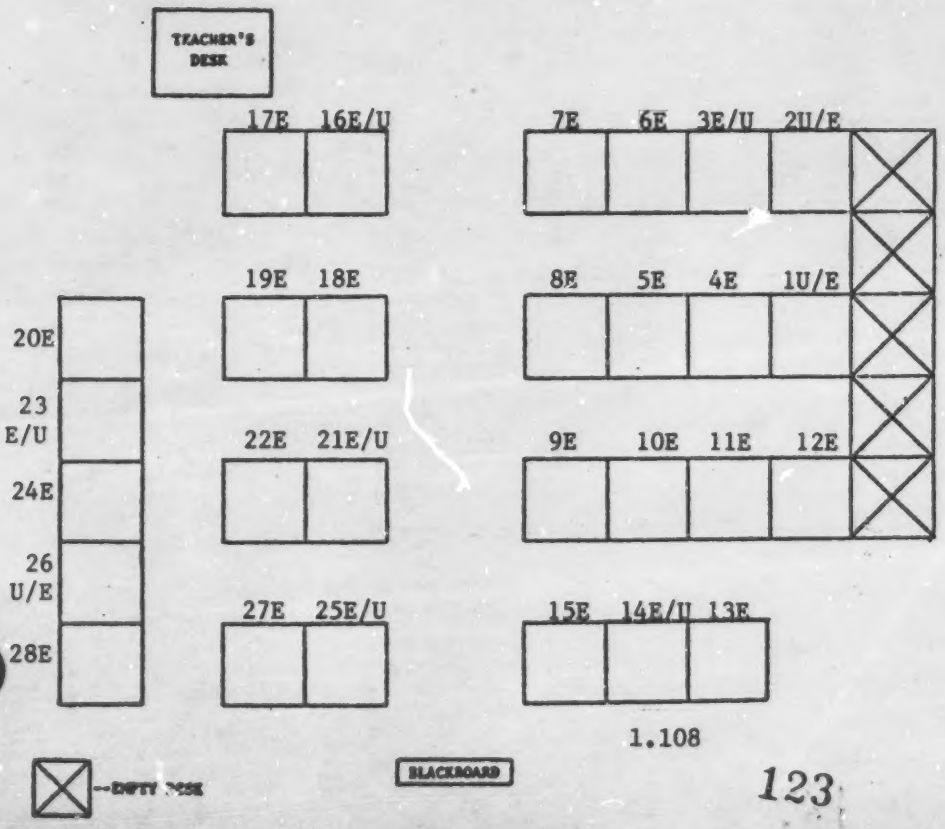
ANSWER KEY FOR 1V32a

Observation #2--28 students



1E/U--Looking at paper or looking at camera
7E--Can't see so assume he is engaged
14E/U--Looking at paper or looking across room
23U/E--Looking across room or looking at teacher

Observation #3--28 students



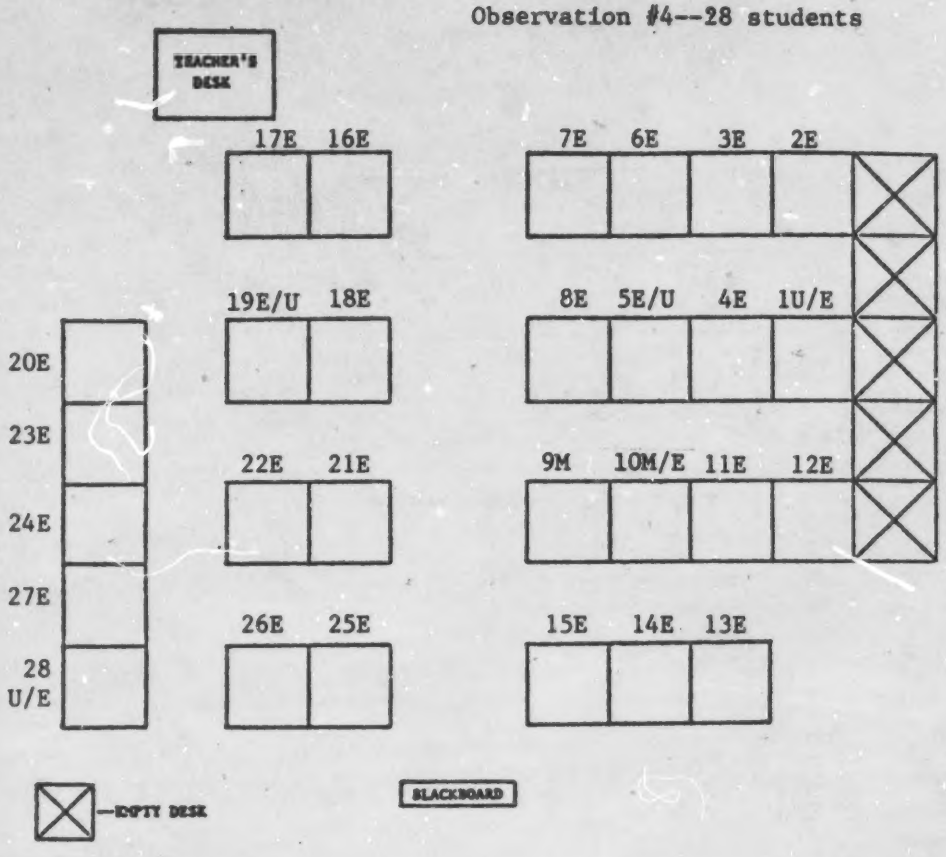
1U/E--Looking at camera or looking at paper
2U/E--Playing with pencil or looking at paper
3E/U--Looking at paper or looking around
14E/U--Looking at paper or looking around
16E/U, 21E/U, 25E/U--Looking at paper or looking around
23E/U--Scratching or listening to teacher
26U/E--Looking around or listening to teacher

1.108

E.1.--Continued

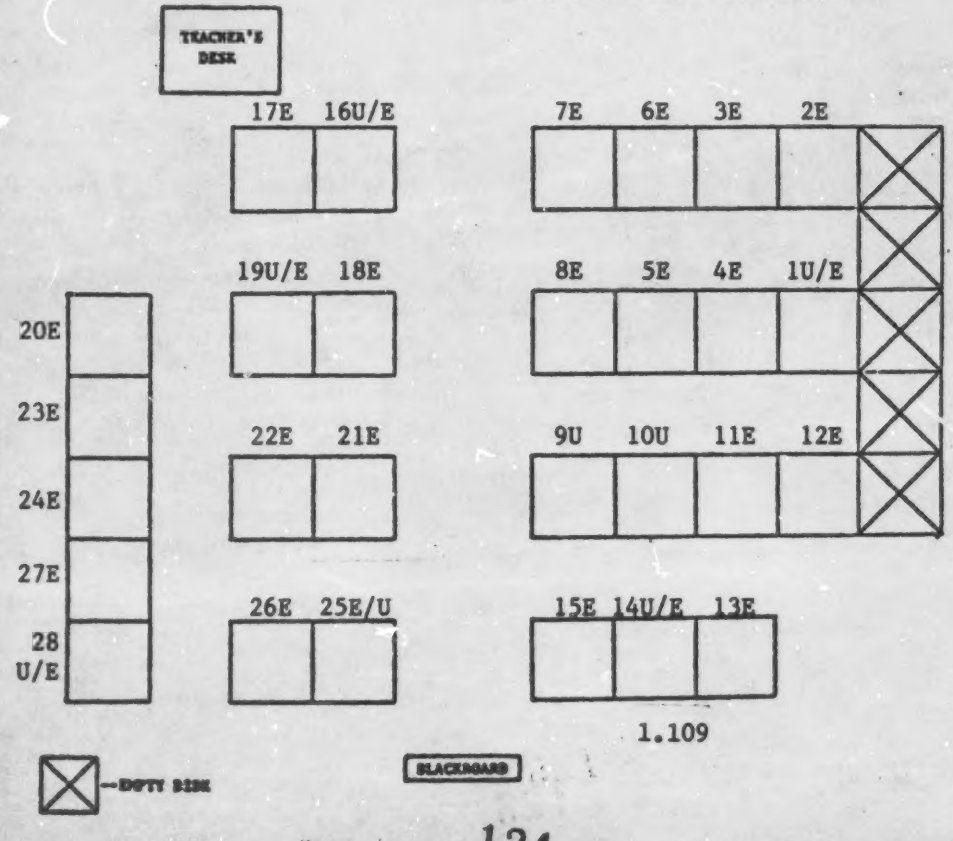
ANSWER KEY FOR 1V32a

Observation #4--28 students



1U/E--Looking at camera or looking at paper
5E/U--Looking at paper or looking around room
9M--Listening to teacher's nonacademic directions
10M/E--Listening to teacher's non-academic directions or reading
19E/U--Looking at teacher/paper or looking at camera
23E--Assume student is engaged
28U/E--Looking around room or looking at paper

Observation #5--28 students

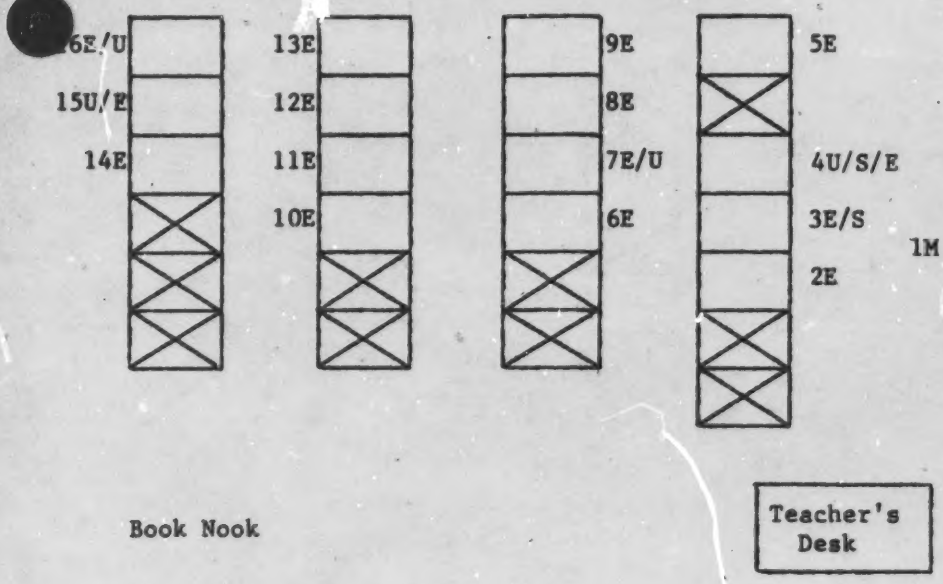


1U/E--Looking at camera or looking at paper
9U--Looking at camera
10U--Looking at student #9
14U/E--Looking around room or looking at paper
16U/E--Looking around room or looking at paper
19U/E--Looking at camera or looking at paper
25E/U--Looking at paper or looking around
28U/E--Looking around or looking at paper

1.109

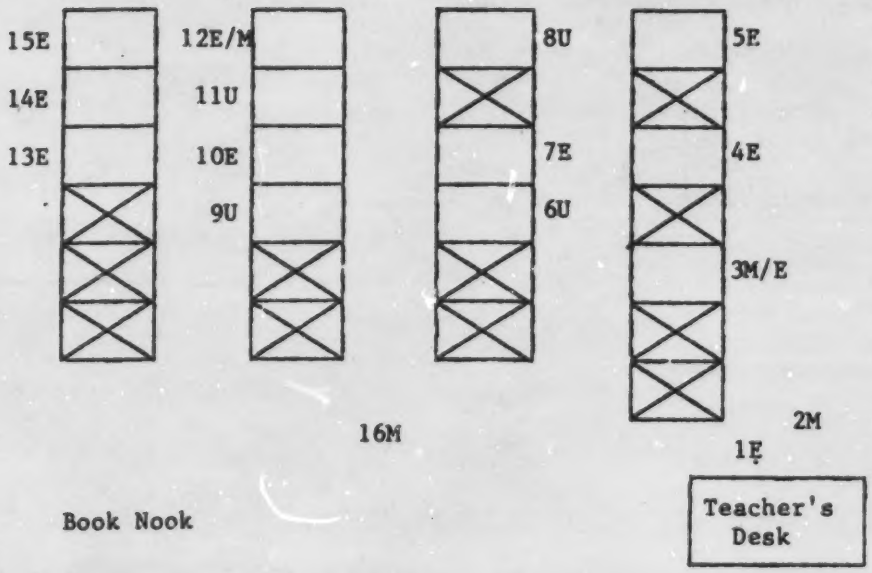
ANSWER KEY FOR 1V32b

Observation #1--16 students



1M--Walking to book nook
3E/S--Talking to neighbor
4U/S/E--Looking at student's paper (#3), talking to neighbor (#3), or looking at own paper
7E/U--Looks up from work
15U/E--Looking at student (not seen)
16E/U--Yawning and looking around

Observation #2--16 students



2M--Waiting for teacher's help
3M/E--Getting materials out of box or working
6U--Looking at student in corner
8U--Looking around and at teacher
9U--Looking at student in corner
11U--Looking at student in corner
12E/M--Turning pages in book
16M--Walking to teacher's desk after being called from corner for making noise

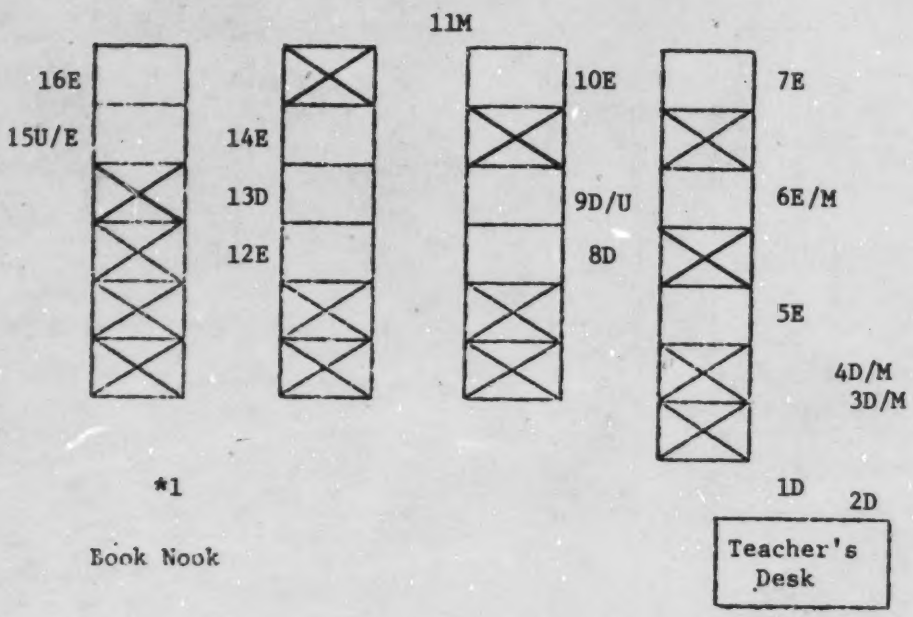
-- Empty Desk

* -- Already counted; do not code

1/14/80

ANSWER KEY FOR 1V32b
Observation #3--16 students

E.1.--Continued



1D--Being disciplined by teacher for making too much noise

2D--Watching student being disciplined

3D/M, 4D/M--Watching student being disciplined or waiting for teacher's help

6E/M--Picking up pencil

8D--Watching student being disciplined

9D/U--Watching student being disciplined or looking around

11M--Walking to teacher's desk

13D--Watching student being disciplined

15U/E--Looking at other student's paper (#16)

- Empty Desk

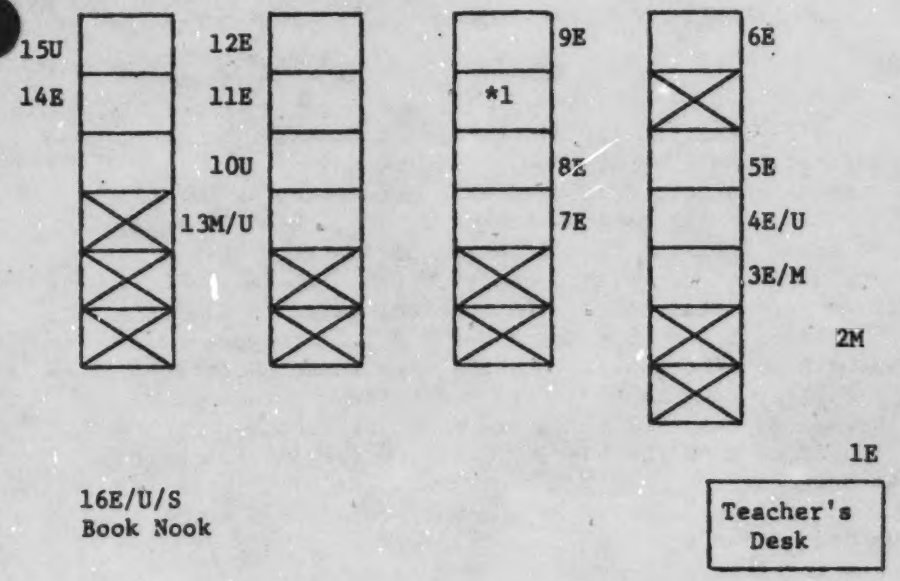
1.111

*--Already counted; do not code

E.1.--Continued

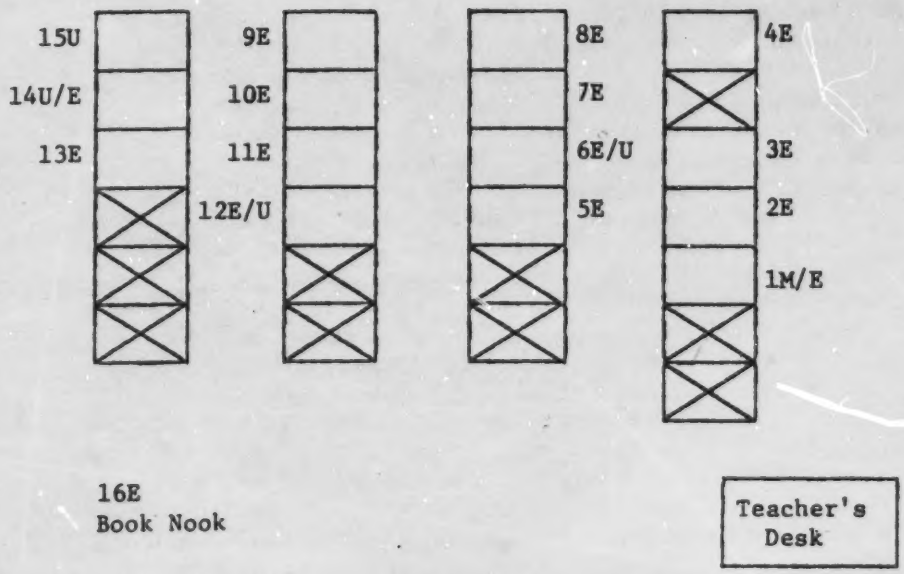
ANSWER KEY FOR 1V32b

Observation #4--16 students



2M--Waiting for teacher's help
3E/M--Measuring or getting materials out of box
4E/U--Writing or wiping face
10U--Looking at teacher helping students
13M/U--Sitting down at desk or looking around
15U--Looking at teacher
16E/U/S--Looking around, looking at game, or socializing

Observation #5--16 students



1M/E--Sitting down; getting ready for new activity
6E/U--Looks around briefly
12E/U--Looking around
14U/E--Looking at camera
15U--Staring

-- Empty Desk

* -- Already counted; do not code

TEACHER COMMENTS FOR 1V32c

Observation #1

"Take your seats. I will tell you the directions in just a second. Do you remember yesterday--Mark, your book should be doing what? It should be closed. Thank you, ok, do you remember yesterday we were practicing some takeaway problems at the board? ... Ok, this afternoon... Tammy...Amanda...Melissa... Listen to all the people we have to wait for. We've been doing an awful lot of waiting today... Shh, Eugene... Ok, remember yesterday we were doing some takeaway problems. I'd like to start out today by doing a few at the board and I'd like to have some people come up and help me find answers. When I see someone sitting especially nice, then I'll know that you are ready for a turn to come up and do a problem. ... I can tell there are a lot of people that aren't going to be ready to come up to the board. ... Ok, maybe Amy can come up and pick a problem and see if she can find the answer to it. Jennifer can also come up and find a problem...(PA announcement) and I think that ...Jason can go up and find a problem...and Lisette may find a problem and Tammy may find a problem... The rest of us should be looking at the board. Let's watch and see if we can find the right answer going up on the board. Let's see...Jeff... What's up, Tammy? ...Shh, let's see if we can find the right answers. You should be thinking to yourself like I see Mark thinking and watching and I see Nancy thinking and watching. See if you can get these problems answered correctly... Ok, very good, Jason, that's fine. ... That's ok."

Observation #2

"Ok, Eugene, let's take a look at this first problem while we're waiting for the rest of the answers. ... Would you please read it for us? ... How would you read this if you looked at it? ... Sorry, I'm sorry, but I don't appreciate calling out. Eugene... Thank you. Jason, sorry I had trouble hearing it because you were talking. You may sit down... Ok, Eugene, is this the right answer...No...Eugene...Lisa, I'm talking to Eugene. Thank you. Eugene, would you please tell us what you think 5 takeaway 2 equals...7...Nancy said, "No." Nancy, do you know... Excuse me, Tammy, Nancy, do you know what Eugene is doing when he said, "5 takeaway 2 equals 7...He thinks it's plus. Remember, Eugene, this sign means that we start out with five things...circles, ok, Eugene. Let's start out with five...then it tells us to takeaway 2. Ok, you want to come up and take-away 2? Erase 2 of those circles, so we don't have them anymore. ... Ok, Eugene, how many circles are left? ... 3. So 5 takeaway 2 does equal 3, doesn't it? ... Ok, very good, ok, let's take a look at this next problem. How would you read this problem? Antonio...Shh... Is that right? ... Ok, there's too much noise. Somebody says, "No." ... Ok, would you please sit down, ok, let's stop a minute...let's stop a minute and think about it. Pencils should be down, Eugene... Pencils should be down ...Eugene, no, it's still not down, is it? No, it isn't...hands on the desk... Thank you...on the desk... Ok, Jason and a couple of people said that"

TEACHER COMMENTS FOR 1V32c--CONTINUED

Observation #3

"it should be 2. ... Let's watch, ok, this time we'll have four boxes. Ok, I need Tanya...to come up and take away 3. ... Erase 3 of them... Jason. ... Ok, how many are left? ... 1. 4 takeaway 3 equals what... 1, ok. Thank you, Jason. ... Ok...Mark... Why is this answer 3... Ok, sit down, ok... When you take away 0, you're not taking anything away. So 3 takeaway 0 is 3. ... Ok, let's see if pictures can help us. Ok, this time we'll try triangles. Here's 3 of them and it says don't takeaway anything. ... So let me put the eraser down, shouldn't I... equals... Ok, if I put my eraser down and I don't use it how many are left? ... 3 takeaway 3 equals ... 3 takeaway 0 equals 3. Ok, how about the next one? ... Do you know what the next one was? ... And the last one...the last one...ok, we have some people saying, "Yes."...and some people saying, "no."... Ok, instead of calling out, let's watch again. Mark, let's look up here. Ivory...I need your help. ... Come up here and help me; you're going to have to help me. We're going to start out with 2 boys, ok... And our problem tells us... That looks like it's a girl. ... We'll pretend it's a boy... Ok..."

Observation #4

"We're going to do what the problem tells us. Ivory is going to do it. We're starting out with 2 boys... Then it says we're going to take them away. They're going out and play... They don't want to be in here, so let's take both of them away, Ivory... How many are left? ... Nothing, zero, ok, we have a little too much help up here. I don't think we quite need it. Thank you very much, Ivory, ok. Would you believe, please, now, let's see if we can do the same kind of problem by ourselves and let's turn to page 90... Page 90. You'll find on page 90 that we're going to have to...be very careful. ... The book is going to try to trick you. It's going to have some plus problems and some takeaway problems. ... By yourself, very quietly, I'd like you to see if you can do that page. I don't want anyone looking at anyone else's paper. ... Very good, Mark got started right away. Richard, let's turn around. ... Ok... excuse me, Antonio... Ok, would Mrs. Mettles' group please--no, not Mrs. Mettles' group just Ted... No, in your seat and get busy..."

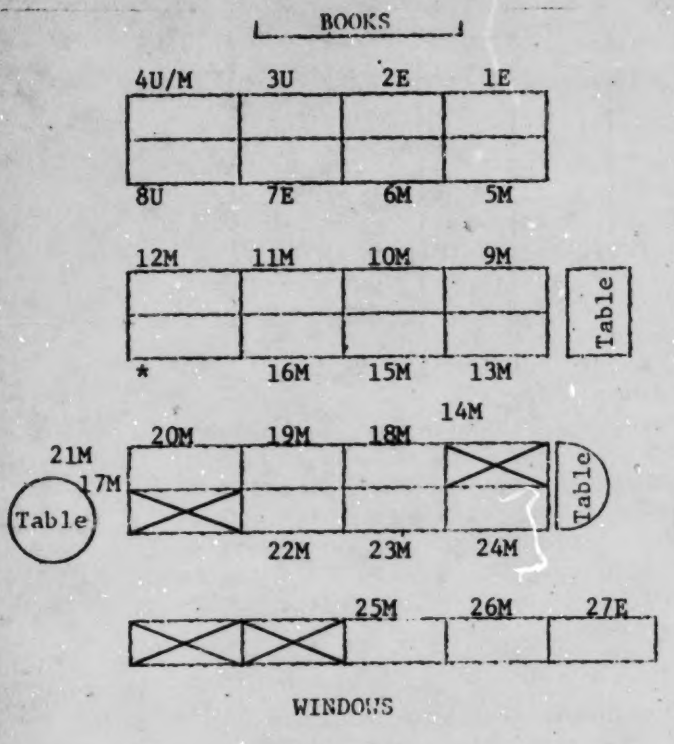
Observation #5

"Sit down... Ok, Jason get busy... Lisa, have you started?... Amy's doing a very nice job..."

E.1.--Continued

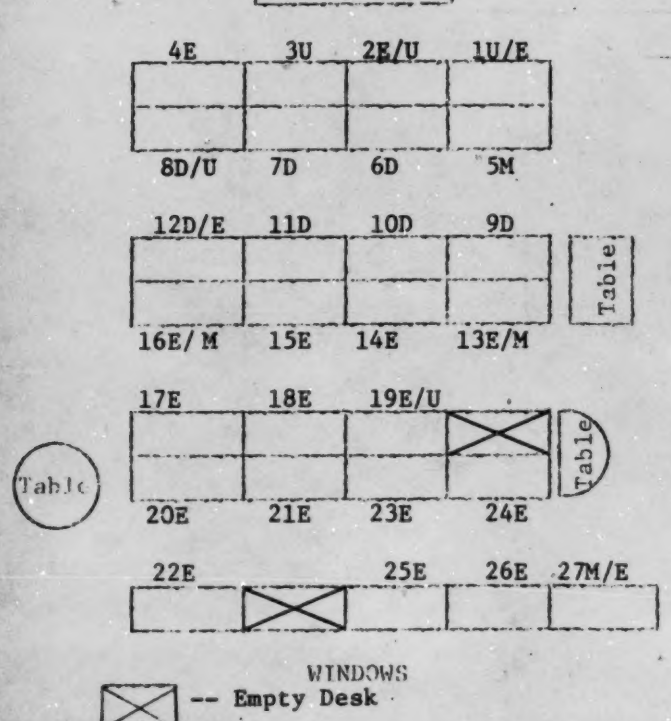
ANSWER KEY FOR 1V32c

Observation #1--27 students



3U-- Looking into space
4U/M--Looking across room or listening to teacher
5M, 6M--Waiting for teacher
8U--Looking around
9M, 10M, 11M, 12M, 13M, 15M, 16M--Listening to teacher's nonacademic directions
14M--Returning to seat
17M--Walking to board
18M, 19M, 20M--Listening to teacher's nonacademic directions
21M--Walking to board
22M, 23M, 24M--Listening to teacher's nonacademic directions
25M--Listening to teacher's non-academic directions
26M--Listening to teacher's nonacademic directions

Observation #2--27 students



-- Empty Desk

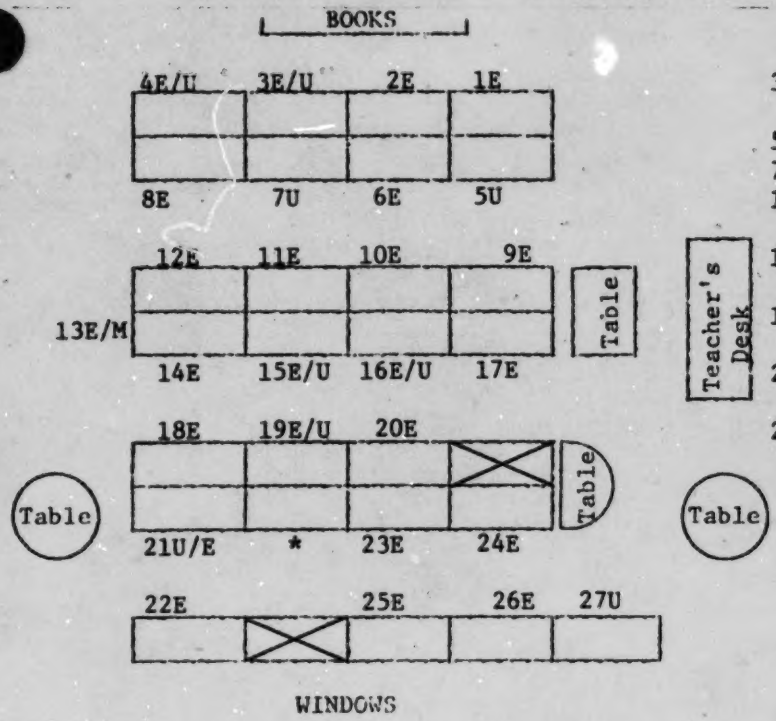
1U/E, 2E/U--Looking around or looking at paper
3U--Looking at neighbor
5M--Playing in desk
6D, 7D--Listening to teacher discipline a student
8D/U--Listening to teacher discipline or looking around
9D, 10D, 11D--Listening to teacher discipline a student
12D/E--Listening to teacher discipline a student or looking at teacher
13E/M--Looking at teacher or listening to directions
16E/M--Looking at teacher or looking in desk
19E/U--Looking at teacher or looking across room
27M/E--Flipping pages in book or looking at teacher

*--Already counted; do not code

1.115

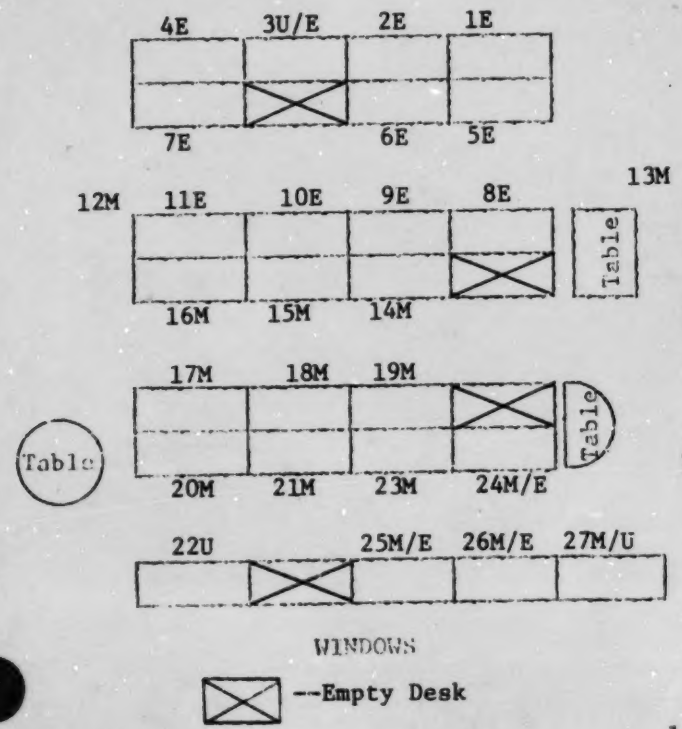
E.1.--Continued

ANSWER KEY FOR 1V32c
Observation #3--27 students



3E/U, 4E/U--Looking at teacher or looking around
5U--Playing with book
7U--Playing with toy
13E/M--Doing problem on board or returning to seat
15E/U, 16E/U--Looking at teacher or looking around
19E/U--Looking at board or looking around
21U/E--Looking at camera or looking at board
27U--Playing with ruler

Observation #4--27 students



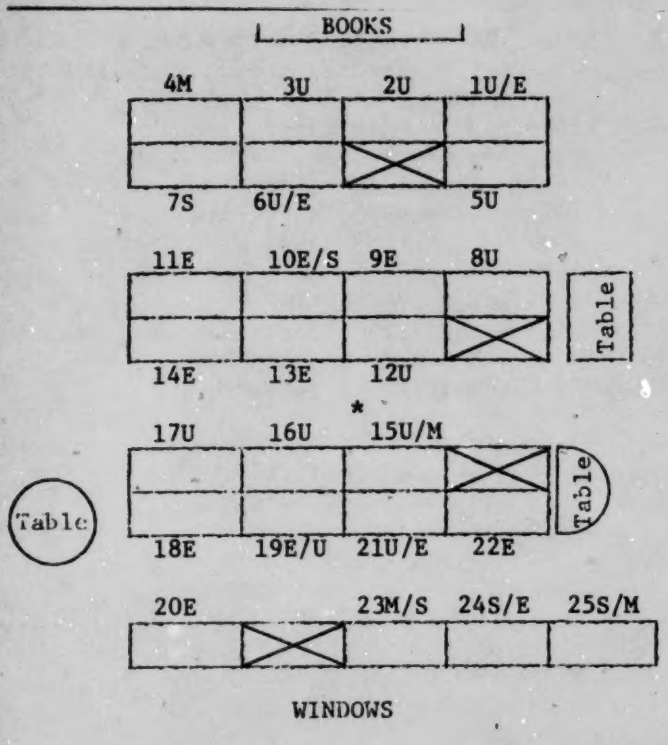
3U/E--Looking around or looking at board
12M--Waiting to return to seat
13M--Walking to bathroom
14M, 15M, 16M, 17M, 18M, 19M, 20M, 21M--Listening to teacher's nonacademic directions
22U--Looking out window
23M--Listening to teacher's nonacademic directions
24M/E--Listening to nonacademic directions or looking at book
25M/E, 26M/E--Listening to nonacademic directions or looking at book
27M/U--Listening to nonacademic directions or looking around

--Empty Desk

*--Already counted; do not code

1.116

ANSWER KEY FOR 1V32c
Observation #5--27 students
(1 pullout; 1 student out of room)



1U/E--Looking around or looking in book
2U, 3U, 5U--Looking around
4M--Turning pages in book
6U/E--Looking around or looking in book
7S--Talking to neighbor
8U--Looking around
10E/S--Looking at book or talking to neighbor
12U--Looking around
15U/M--Looking around or listening to teacher's nonacademic directions
16U--Looking at neighbor
17U--Looking around
19E/U--Looking in book or looking at neighbor
21U/E--Looking around or looking in book
23M/S--Moving papers around or talking to neighbor
24S/E--Talking to neighbor or looking in book
25S/M--Talking to neighbor or turning pages in book

--Empty Desk

1.117

*--Already counted; do not code

E.2. Independent Practice Videotape

The following pages include an answer key for the videotape 1V33. This key provides the correct categorization for each student for each observation.

The answer key includes the number of students present; a diagram showing the order of coding, location, and classification of each student; and the reasons for classification of all unengaged students. Students out of the room are also indicated. The location of each student is shown by a number and a letter; the number indicates the sequence in which students are coded, while the letter(s) indicates the behavior category. For example, on observation #1 student 8S is the eighth student coded; he is located by the desk nearest the camera in the first row and is coded as socializing, since he is talking to another student. The behavior codes are as follows:

E -- Engaged
M -- Management/Transition
S -- Socializing
D -- Discipline
U -- Unoccupied/Observing
Ao -- Assigned Other

The specific behavior of each unengaged student is described for each observation. Where the categorization of a student may vary, this is indicated by a slash. Thus, student 7E/U is the seventh coded, and he/she may be coded as either engaged or unoccupied/observing. This may happen if the student changes behaviors during the time an observation can be made.

Two symbols are used on the pictures to help observers:

Empty desk

* Student has already been coded but has moved; do not code again (e.g., *8 -- this was the eighth student coded; although he/she appears on screen again, skip him/her)

Note: Adding the minimums or maximums for the individual unengaged categories in an observation does not always yield the minimum or maximum for the total number of unengaged students, since some students may be coded in one of two or three unengaged categories (e.g., M/U).

Three dots (...) in the teacher comments indicate either a student response or comments made by the teacher and students between scans of the classroom.

E.2.--Continued

TEACHER COMMENTS FOR 1V33

Observation #1

"All right, we counted by 1s, didn't we? That's the way we've been counting all year, one right after the other, one right next to the other. And we used our number line before, we went by 1s, didn't we? Well, today we're going to learn how to count by 2s, and if we have time, we're going to learn how to count by 5s. Is that faster than counting by 1s? ... It's a lot faster. All right. Kevin is going to walk for us here. He's going to start at 0, and he's going to take a step that gets him all the way over to 2. Can you get to 2? Ok. That's 2. 1, 2. He took 2 steps. Everybody put out 2 beans. Shaun, will you put 2 blocks here so everybody can see them? Ok. You should have 2 beans out like his 2 blocks, and will you circle the 2? He started here. Let's circle the 2, the first 2."

Observation #2

"He started at 0, and he went over to 2, ok, and he stopped at 2. Now, can you take 2 more steps? Where are you going stop this time, Kenneth? ... 4. All right. So put another set of 2, everybody, 4. How about 2 more steps? Now where are you? ... 6. Ok, 2 more. ... Up to 8. Do you have your sets of 8 out? You should have 2,4, 6,8. Ok. Keep them in sets of 2, keep them in sets of 2. Let's keep them so they're in sets of 2. All right. Just like Shaun's doing. See how he has his in sets? Oh, you can't see them. I'm going to have to change those. So you can see them in sets of 2. You have the right number, dear, but let's fix them so that you see them in sets of 2. Ok? ... No, you should have 8. Let's get 2 more. Everybody have 8 now?"...

Observation #3

"All right, Kenneth, how about 2 more sets? Now where are you? ... 10. All right, everybody put out 2 more. Now, 2 more sets. ... 12. Well, all right. Now, Jason, you can put the crayon down for a minute. How many do we have here all together, Shaun? ... 12. Instead of counting by 1s, let's count by 2s this time. Start with 0. Point to your set of 2 if you want to. ... What are we going to have next? 2, ... 12. We counted by 2s. Now point to your sets of beans. Jason, you point to our set up here. Help me to count, ok? Everybody, are you pointing to your set of blocks?"

Observation #4

"You point to each set of 2. Now how about coming back here and as they count in 2s, you are going to walk in 2s. All right, ready, 2,4,6,8,10,12. I didn't say put them all out again, just leave them out like they were, and point to the sets of 2 as we count them. We're going to have to do it again. Everybody have their sets of 2s out? ... Ok, let's leave them like you had them before, David. Ready, go. 2, ... Wait a minute, wait a minute, Kenny's not ready. Come back and jump for us again."

Observation #5

"All right, ready. 2,4,6. Are you counting along? 12. All right, you want to try it again? Kenny? And everybody, let's watch him and let's go and point to your own sets of 2. You ready, Kenny? 2,4,6,8,10,12. ... Woop, we're going to have to keep doing it here, everybody's not doing it yet. Get your 2s out and point. Maybe this time it will be more fun if you put your fingers on the two of them. Put your 2 fingers on them like this. Go on that way. Some of you have been doing it all along. Ok?"

TEACHER COMMENTS FOR 1V33--CONTINUED

Observation #6

"Maybe it will be more appropriate if you will put your two fingers on them like this, like you have been doing it all along. Let's try it again. Ready - 2, 4, 6, 8, 10, 12. Does anybody know what would come next? ... We're counting by 2s. ... No, that would be counting by 1s; it's one higher. Kenny? ... 14? ... All right. You want to jump to 14 for us? What's going to come after 14 if we're counting by 2s? Maryanna ... 16. All right, who can guess what's going to come next? Judy... 18. What will come next, Richard?" ...

Observation #7

"No, that's counting by 1s again. 20. All right. Does anybody think they know what's going to come after 20? What's it, Richard? ... 22. What's going to come after that? Jeff ... 24. Mike, do you know what's going to be next? ... 26. What's going to be next? ... What's going to be next? ... 28, what's next? ... No, that's by 1s again. No, 30. ... What's going to come after 30? ... No, that's by 1s again." ...

Observation #8

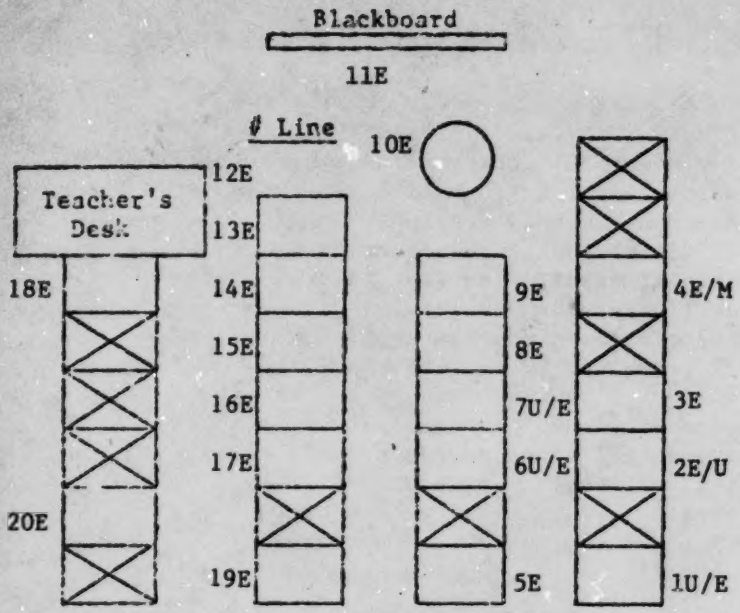
"32...34... No, that's by 1s again...36... No, that's by 1s. 38, ok. What comes after 38? ... 40. All right, let's all start with zero and go all the way up. Count with us here even though you're only counting to 16. Ready. All right, you can go counting up to 12, Shawn, you'll point to 12. Ready, 0, 2. Everybody start with zero. 0, 2, 4, 6, 8, ... Uh, uh, uh, 10." ...

Observation #9

"12, 14, 16, keep going, 18, 20. All right, very good. You people may go back to your seats. Let's look at the page where at the top you'll see the Indian feather. It says "How Many?" How many? On the first Indian band, how many feathers, David? ... So write your 2 underneath. See if you can fill in all the Indian feathers counting by 2s."

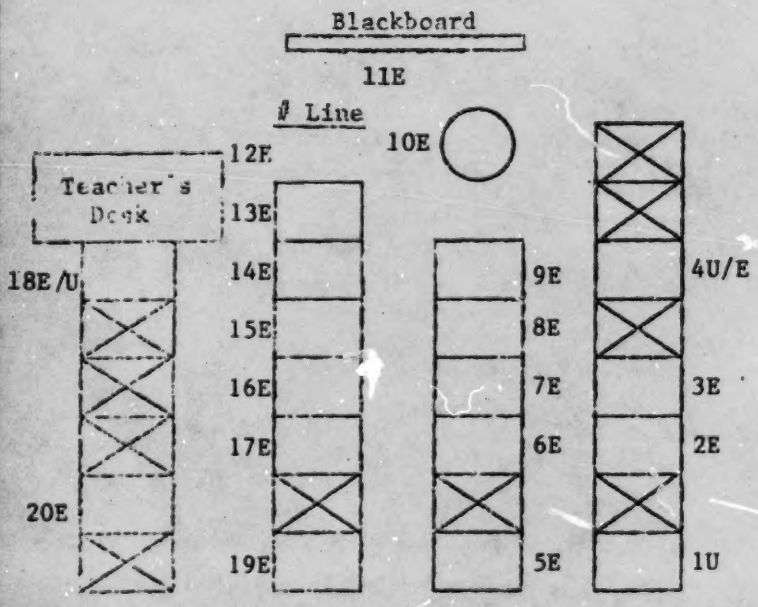
ANSWER KEY FOR 1V33
Observation #1--20 students

E.2.--Continued



1U/E--Looking out windows
2E/U--Looking around
4E/M--Looking at papers or putting away materials
6U/E--Looking at student (#7)
7U/E--Looking at camera or at blackboard

Observation #2--20 students



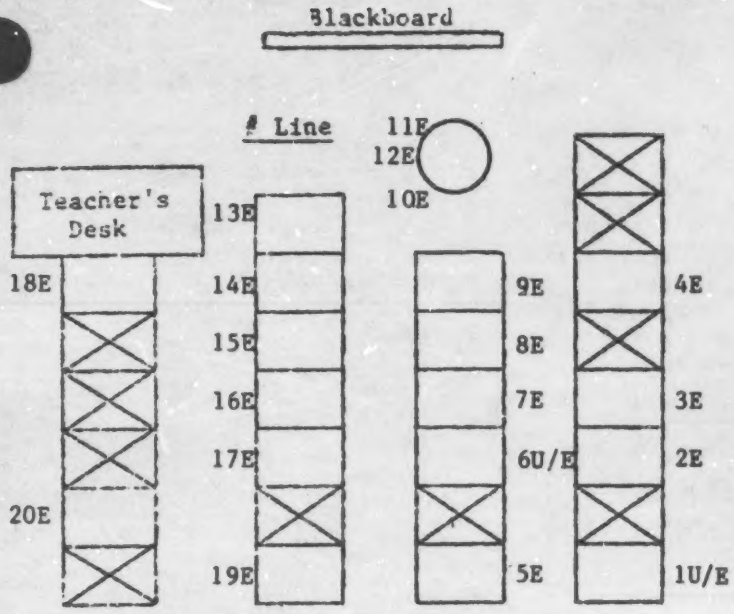
1U--Looking out windows
4U/E--Looking at camera or at blackboard
18E/U--Looking at blackboard or camera

1.121

--- Empty desk -- Table * -- Already counted; do not code

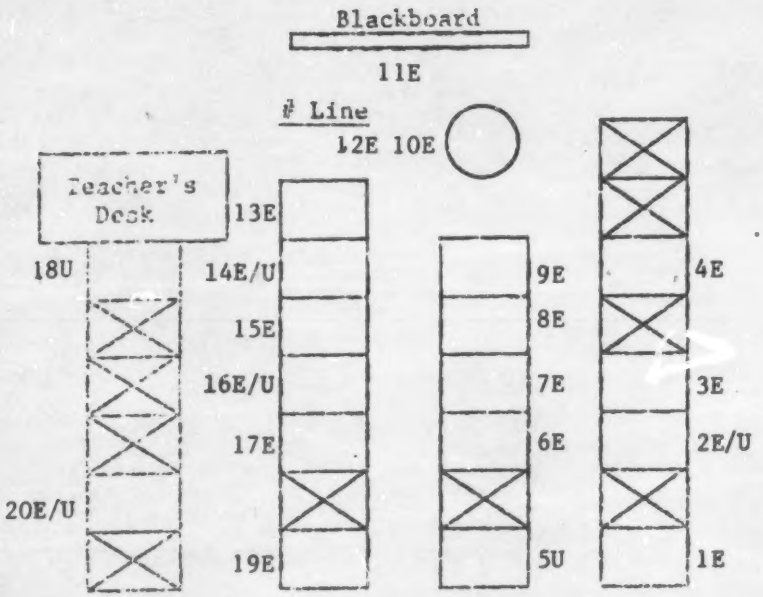
ANSWER KEY FOR 1V33
Observation #3—20 students

E.2.--Continued



1U/E--Looking at camera
6U/E--Looking at camera or doing work or looking at teacher

Observation #4--20 students



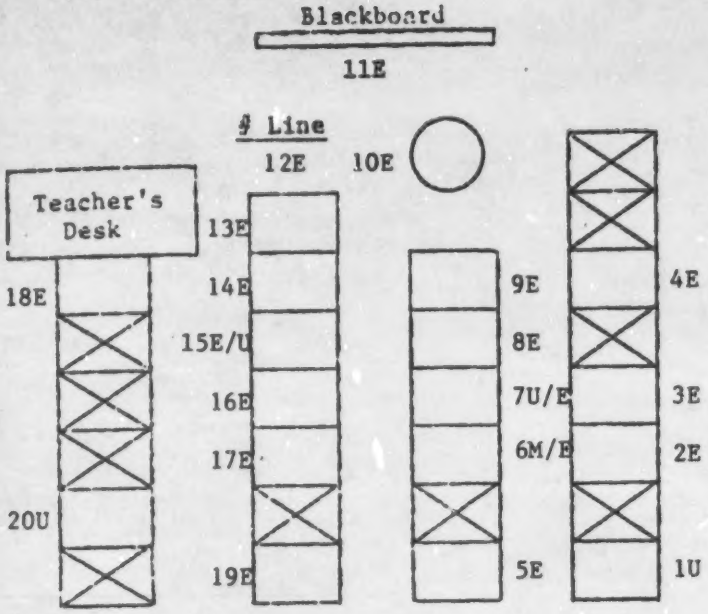
Teacher is providing corrective feedback to students.

2E/U --Looks up briefly
5U, 18U--Looking at camera
14E/U --Looks at camera
16E/U --Looking at teacher or looking around
20E/U --Doesn't have beans out

-- Empty desk -- Table * -- Already counted; do not code

ANSWER KEY FOR 1V33
Observation #5--20 students

E.2.--Continued

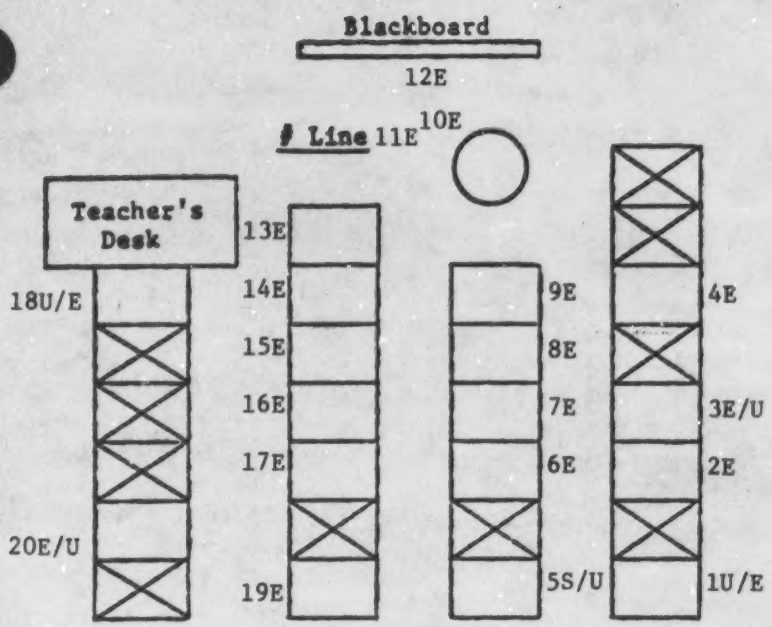


Teacher is giving corrective feedback.

1U, 20U--Looking at camera
6M/E--Picked up something from floor, then paying attention
7U/E --Looking out window; then looking at board
15E/U --Looking around

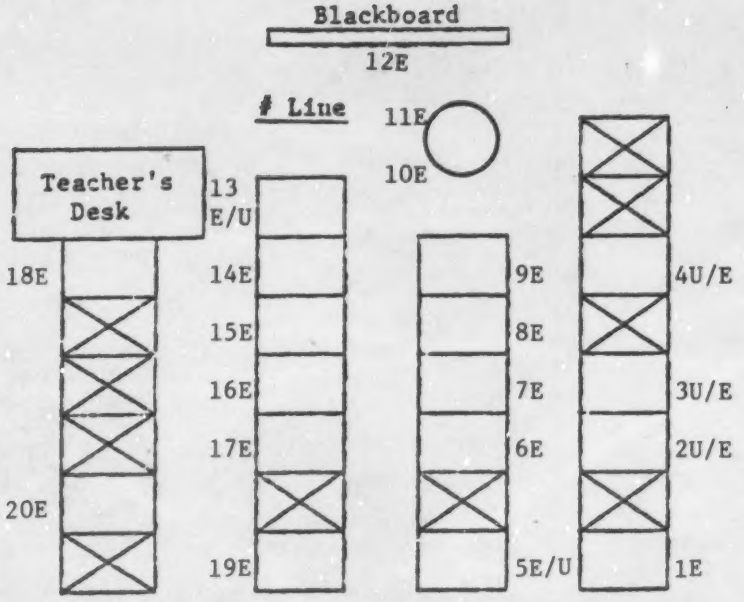
-- empty desk -- Table * -- Already counted; do not code

ANSWER KEY FOR 1V33
Observation #6--20 students



1U/E--Looking at camera or looking at teacher
3E/U--Looking at beans or looking around
5S/U--Talking to neighbor or looking around
18U/E--Looking at camera or looking at teacher
20E/U--Looking at teacher or looking at camera

Observation #7--20 students



2U/E--Looking at camera or looking at teacher
3U/E, 4U/E--Looking around or looking at teacher
5E/U--Looking at teacher or playing with pencil
13E/U--Looking at teacher or looking around

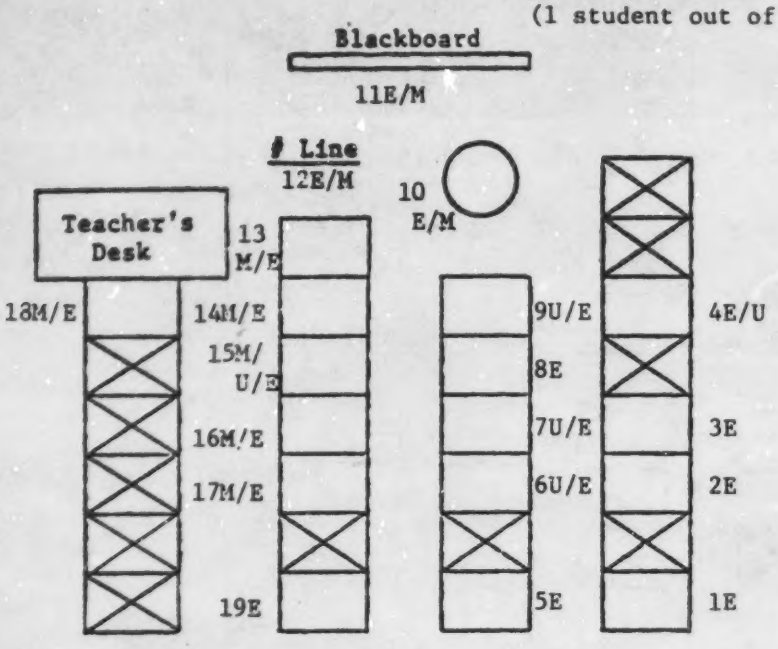
-- Empty desk

* -- Already counted; do not code

E.2.--Continued

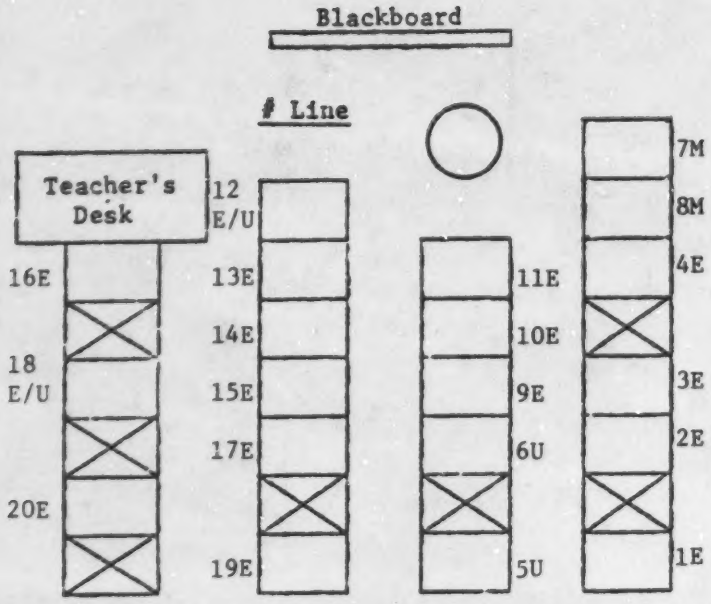
ANSWER KEY FOR 1V33

Observation #8--20 students
(1 student out of room)



4E/U--Looking at teacher or looking at camera
6U/E, 7U/E, 9U/E--Looking at camera or looking at teacher
12E/M--Listening to teacher or getting ready for next activity
13M/E, 14M/E, 16M/E, 17M/E, 18M/E--Waiting for --teacher or listening to teacher
15M/U/E--Waiting for teacher, looking at camera, or listening to teacher

Observation #9--20 students



5U--Playing with toy
6U--Looking at camera
7M, 8M--Returning to seats
12E/U--Looking at page or looking around
18E/U--Looking at teacher or putting on shoes

1.125

-- Empty desk

* -- Already counted; do not code

⊛F. Demonstration of mastery of the Engagement Rate Form (60-120 minutes)

Rationale. Observers need to be certain that they can collect data accurately using the Engagement Rate Form. Leaders need to certify mastery before information collection proceeds.

Materials

√1H35--Engagement (a-g) Rate Form
1V36--Demonstration (a-c) of Mastery on the Engagement Rate Form
1T37--Answer Key (a-f) for √1H35 --Engagement Rate Forms (3)

Strategy

Review the directions sheet (√1H35a) and decide which tapes will be viewed. Observers must either demonstrate mastery or "almost" demonstrate mastery on 1V36c before collecting data in classrooms. Most groups will probably want to begin with 1V36a or 1V36b and then go on to 1V36c. If you believe that your group needs additional practice or an opportunity for a successful experience, however, view both 1V36a and 1V36b. If the group did very well on the last tape (1V33), you may wish to begin with 1V36c. Before viewing the videotape for each classroom, be sure to read the Pre-Observation Form and the "Hints for Coding" page that describe the classroom. After completing an Engagement Rate Form for the first selected classroom, check and discuss answers. Answer keys showing the correct coding of each student during each observation are included in Note F. In order to demonstrate mastery, participants (1) must be within the indicated range for the number of students engaged on at least 8 of the 10 observations and (2) must be within the indicated range for the total number of students engaged. If some people "almost" demonstrate mastery (i.e., within the indicated range for number engaged on at least 6 of 10 observations and within range on total or within the indicated range on at least 8 of 10 observations and within 15 students of the total engaged), these people should code 1V36a or 1V36b if they have not already done so before proceeding. For example, someone who begins with 1V36c and "almost" demonstrates

Demonstration of mastery of the Engagement Rate Form--Continued

Materials	Strategy
	mastery should also code 1V36a or 1V36b. However, someone beginning with 1V36b who "almost" demonstrates mastery would proceed to 1V36c. Those people who do not demonstrate mastery may need to code the tape again (e.g., someone who demonstrates mastery on 1V36a but fails to do so on 1V36b may need to code 1V36b again if his/her errors were due to a faulty understanding of the definitions). You may wish to have them code all or part of any easier tapes (A and B are of approximately equal difficulty and are easier than C) they have not seen before coding the tape again (e.g., someone who begins with 1V36b and fails to demonstrate mastery should probably code 1V36a and then perhaps code 1V36b again before looking at 1V36c). If participants have seen all the easier examples on 1V36, you may wish to go back to the definitions and training tapes in Topic E and Appendix E before coding the tape again (e.g., someone who fails to demonstrate mastery on 1V36a should probably go back to the definitions and training tapes). If participants fail to demonstrate mastery on two tapes in a row, they should return to the definitions and training tapes before proceeding.

Alternative Strategies

1. Have observers complete the checkpoint between meetings. Check completed forms at the next session.
2. Not all participants may want to use the same viewing pattern. In this case, you may want to provide choices by using two or more sets of videotape equipment or by setting up small group meetings to view each tape separately.
3. You may wish to break up the coding of videotapes by completing the activities in Topic G (Allocated Time Log) and/or Topic H Scheduling).

1. Directions for checkpoint (√1H35a)
   a. Purpose--ensure accurate collection of information
   b. Viewing pattern--must demonstrate mastery on C
      (1) Most groups use B → C
      (2) If want to start with easier tape, use A → B → C or A → C
      (3) If want to start with more difficult tape, use C
2. Pre-Observation Form (√1H35b, √1H35d, √1H35f)
3. Hints for coding (√1H35c, √1H35e, √1H35g)
4. Videotape (1V36)
5. Directions for Engagement Rate Form

†6. Calculations (1T37)

Materials

In addition to the materials included here, the following will be needed:

Engagement Rate Forms (3) (Forms)

CHECK-PT

DIRECTIONS FOR DEMONSTRATING MASTERY OF THE ENGAGEMENT RATE FORM

Since classroom observation data will be compared to data collected in research studies, comparisons are only valid if the observations are carried out in a manner similar to that used in the original study. Thus only trained observers should collect data that will be used in comparisons. Those people collecting data should complete this checkpoint to check whether they are coding in a manner similar to that used in the research studies.

There are samples from three classrooms on the videotape for this checkpoint. Individuals who are going to be doing observations in a classroom or who are going to train others to do observations in a classroom should "master" this checkpoint. Mastery can be demonstrated by coding sample C within an acceptable range (i.e., 8 of 10 observations within the indicated range and the total engaged within the range). Most observers will probably want to begin with sample A or sample B, although some may wish to begin with the more difficult sample C. Before coders attempt the mastery of these tapes they should already have coded 1V33 (Independent Practice in Observation) within an acceptable range. Alternative sequences for viewing the tapes are listed below.

- A → B → C
- A → C
- B → C
- C

Before completing an Engagement Rate Form for each classroom, read the description for that class on the Pre-Observation Form that follows. If time permits, you may also wish to preview part or all of the tape in order to better understand what is happening in the class.

When completing the Engagement Rate Form, record all the identification information and observation times in the headings as they are indicated on the videotape or Pre-Observation Form. Also be sure to record data for each subject in the appropriate part of the form. When recording data you may wish to use the still-frame on a group of students so you may observe them longer. It may be necessary also to repeat a segment several times to be certain of what particular students are doing. After you complete a form for one classroom, check with your meeting leader to see if your engagement rate is within the acceptable range. If your engagement rates are not within this range, the leader will indicate which categories of behaviors you are coding incorrectly.

3/25/80

√1H35b

Pre-Observation Form for Classroom A - Grade 6

Teacher *Peter Demetrios*

Observer

Time Interval *2 minutes*

No. of Students Present *16*

Subject *Reading/Language Arts*

Observation Date *10/20*

Circle Part of Period: beginning, (middle), end

Record number of students assigned to each category during the observation period.

Times	Reading/ Language Arts	Math	Other Subjects Specify:	Pull-Out	Out of Room Specify:
10:02	*16 students assigned to reading/language arts*				

Pre-Observation Form (cont'd)

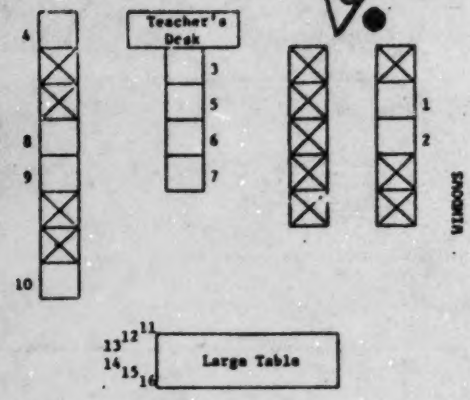
Briefly describe assignments for each subject and free-time activities (attach worksheets if possible).

Reading/Language Arts

At first I will be working with a small group, while the rest of the class is doing seatwork. Then the small group will be working independently, while I work with the large group on a reading assignment.

1.131

HINTS FOR CODING CLASSROOM A



The classroom's arrangement and the general pattern for coding are shown. The students next to the large table (#11-#16) return to their seats around that table after observation #2.

The teacher makes the following comments:

Observation #1

The teacher is working on academic content with a reading group.

Observation #2

"I want you to complete pages 41, 43, and 44. The second thing I want you to do is to copy the new spelling words. Those right there. There are ten of them. ... They are words for the next story. This story here. ... No, the other ones, here. Ok, the third thing I want--are you listening, Albert? ... is to do some extra writing. How are we going to find time to do that? All right, what I want you to do now is this. Ok. Go back. Sit along here. Get a pencil out and do these three dittos. As soon as you complete all three, staple them and put them on my desk. They are not due today. They are due Monday. Ok? ... As soon as you do that you move along and what do you do? Ron? ... Number two. Yes, and when you are all done with that you can go to your SRA folders. Ok, go right around here. Go this way... By Monday..." ...

Observation #3

"Ok, I'll pass these out to you. I have two papers here. As I give them to you now the first thing I want you to do with them is what? ... Albert, would you like to sit over there? There's more room. Ok. It's not gonna last... Put your name on it. ... Put your name on it. Turn that chair around back. Carol... All right, we will go over each one together real quickly. People up front there keep reading that story. I'll be with you in a second all right. We're going to begin from the very beginning." ...

Observations #4-#5

The teacher is working on academic content with the larger group.

Observation #6

"So what would you connect to that sentence? What number? ... Two. That happened next. All right, so why don't you do the other two first and then go back to this if you like. What will you be doing after this, Dan? If you complete these three? ... And put it on my desk, then what? ... Ok, but take your time with the papers. Let's not rush through these. Ok, any questions? Come up here and I'll answer any questions for you. Are there names on every one? ... Ok. Ok. People up here. Let's turn to the beginning of the story. I think a lot of you have been reading it already and you have an idea of what the story is about. What is the name of the story, Dick? ... Communication--Just Words. What does communicate mean? Who can tell me that? I'm communicating, what am I doing? ... All right, they tell you they what? ... They are happy. Are they saying anything to you or are they just smiling? Right. That's a facial, a sign, that you are happy. What's another way of communicating? From one to another... Talking." ...

Observation #7

The teacher is working on academic content with the larger group.

Observation #8

"All right, good. ... (PA announcement) Complete that for us, Kathy. Kathy... Ok... siren..." ...

147

Observations #9-#10

The teacher is working on academic content with the larger group.

3/11/80

√1H35d

Pre-Observation Form for Classroom B - Grade 3

Teacher Sue Lee

Subject Math

Observer

Observation Date May 25

Time Interval 1 minute

No. of Students Present 16

Circle Part of Period: (beginning) middle end

Record number of students assigned to each category during the observation period

Times	Reading/ Language Arts	Math	Other Subjects Specify:	Pull-Out	Out of Room Specify:
11:00		16 students assigned math			

Pre-Observation Form (cont'd)

Briefly describe assignments for each subject and free-time activities (attach worksheets if possible).

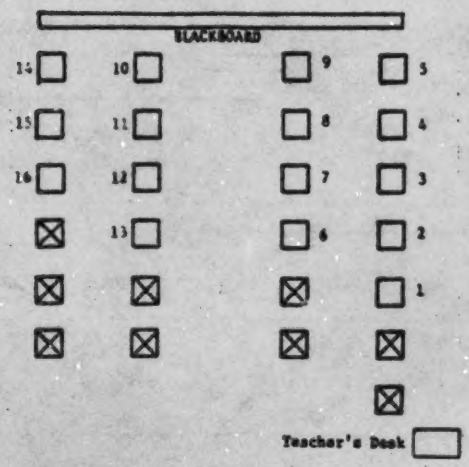
Math - I will start the period by giving the students their assignments and then they will independently work on them. First the students will either be finishing their math workbook assignments or completing two worksheets on two-digit multiplication. Then they will be checking their measurement boxes in the front of the room. If there are incomplete worksheets in them, they will complete them. Then they will be doing free time activities: Elephant Timers, People and Snoopy games, flash cards, etc.

1.133

3/11/80

√1H35e

HINTS FOR CODING CLASSROOM B



The classroom's arrangement and the general pattern for coding are shown.

Students standing at the teacher's desk are coded first, and in observations #6 and #8, the second row from the right is scanned in reverse order.

The teacher makes the following comments:

Observation #1

"When that's done, you're each going to get one of these multiplication worksheets that we've been working on, with the riddle at the top. . . . We're also going to go over the two-digit multiplication . . . you remember . . . right, um-hum, this type . . . all right . . . right . . . all right . . . When that's finished and in my wooden box--don't forget your name again--you're to go and find your measurement box, please. If you finish all that you are to do in there and your worksheet is out of your box, then just put it on the table."

Student: "What about Mrs. Hausel's group, we don't have a box yet?"

Observation #2

"All right, well then, of course, that will be with you. You don't have to be concerned about that. Question, Doug?"

Student: "Can we keep the boxes?"

". . . No, I use those every year. I'm sorry . . . All right, the next thing is free activity and I think you can tell me what ideas I have. Bobbie Jo . . . The elephants, ok, the Elephant Timers--and if you use that, will you share please? Now you know, if you have the box, share with someone else. Anything else you can think of? Greg, let's not . . ."

Student: "Do our multiplication cards."

Observation #3

". . . All right, there are flashcards in the back. Very good. So I don't think we should have any trouble finding something to do if you're all finished. Ok, I'll have your papers passed out in a minute and then you can be finishing your work. Megan, I would like you to finish this exercise . . . (indecipherable) . . . Rusty, would you close your workbook please because these two need to be finished first. . ."

Observation #4-#9

The teacher is working with individual students.

Observation #10

"You can't put the answers in until you add them."

3/11/80 Pre-Observation Form for Classroom C - Grade 1 √1H35f

Teacher *Ann Smith* Subject *Reading*

Observer _____ Observation Date *April 19*

Time Interval *1 minute* Circle Part of Period (beginning) middle end

No. of Students Present *28*

Record number of students assigned to each category during the observation period.

Times	Reading/ Language Arts	Math	Other Subjects Specify:	Pull-Out	Out of Room Specify:
11:00-11:09	*27 students assigned to reading at first. 28 students assigned to reading when pullout student returns.*		*Students may work on puzzles when reading assignment is done.*	*1 student until 11:07.*	*1 student will be leaving room briefly at 11:03.*

Pre-Observation Form (cont'd)

Briefly describe assignments for each subject and free-time activities (attach worksheets if possible).

Reading

Group 1 --*I will be meeting with this reading group to work on vowel sounds.*

Group 2 / Group 3 } *Students will be working at their seats. The assignment is to write a story and then draw a picture to go with the story.*

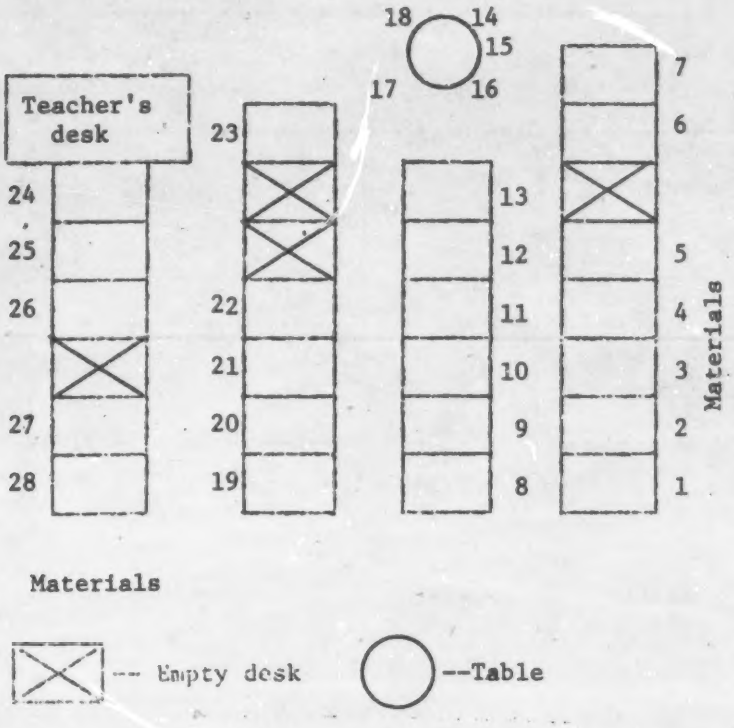
Other *Students who finish their reading assignment may work on puzzles.*

3/11/80

√1H35g

HINTS FOR CODING CLASSROOM C

The classroom's arrangement and the general pattern for coding are shown in the diagram. The student at desk #23 is a pull-out until observation #8. In the last observation, the students at desks #4 and #28 are assigned to free-time activities using manipulatives. During several observations, students are getting materials from the right-hand side and/or lower left corner of the room.



The teacher makes the following comments:

Observations #1-#7
The teacher is working with a reading group.

Observation #8
"Let's turn to page 31 in our books, in this book, 31. ... Um-hum." ...

Observations #9-#10
The teacher is working with a reading group.

Note: The blackboard has nothing pertaining to the assignment written on it.

1V36 consists of three videotape clips of three classrooms to be used (with √1H35) to demonstrate mastery of the Engagement Rate Form.

KEY FOR 1V36

Classroom A

STATE _____
DISTRICT _____
SCHOOL _____
TEACHER Peaches
CODER _____

ENGAGEMENT RATE FORM

STATE # 03 SCHOOL # 10 DATE 10/20 GRADE 6

DISTRICT # 47 TEACHER # ___ CODER # ___ # STUDENTS PRESENT 16

PART OF CLASS OBSERVED: Beg. ___ Mid. ✓ End ___

	TIME	1 10:02	2 10:04	3 10:06	4 10:08	5 10:10	6 10:12	7 10:14	8 10:16	9 10:18
READING/LANGUAGE ARTS	ASSIGNED	16	16	16	16	16	16	16	16	16
	MANAGEMENT/ TRANSITION	1	6	6-8	0-2	0-3	0-1		2-3	2-4
	SOCIALIZING					0-2				0-1
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING	0-5	0-5	3-6	1-6	2-4	1-3	0-1	0-4	0-2
	OUT OF ROOM									
	TOTAL UNENGAGED	1-6	6-11	9-14	1-8	4-6	1-4	0-1	2-6	2-7
	ENGAGED	8-16	3-12	0-9	6-16	8-14	10-16	13-16	8-16	7-16
MATHEMATICS	ASSIGNED									
	MANAGEMENT/ TRANSITION									
	SOCIALIZING									
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING									
	OUT OF ROOM									
	TOTAL UNENGAGED									
	ENGAGED									
	OTHER ASSIGNED									
	PULL OUT ASSIGNED									
	NO. OF STUDENTS PRESENT									

6/19/80

1T37b

KEY FOR 1V36a

	TIME	10 10:20	11	12	13	14	15	TOTAL	ENGAGEMENT RATE
READING/LANGUAGE ARTS	ASSIGNED	16						160	ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION	2-4						19-25	
	SOCIALIZING							0-1	
	DISCIPLINE							0	51-84%
	UNOCCUPIED/ OBSERVING	1						9-37	
	OUT OF ROOM							0	
	TOTAL UNENGAGED	3-5						28-61	
	ENGAGED	9-15						92-136	
MATHEMATICS	ASSIGNED								ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION								
	SOCIALIZING								
	DISCIPLINE								
	UNOCCUPIED/ OBSERVING								
	OUT OF ROOM								
	TOTAL UNENGAGED								
	ENGAGED								
	OTHER ASSIGNED								
	PULL OUT ASSIGNED								
	# STUDENTS PRESENT								

3/11/80

KEY FOR 1V36

Classroom B

1T37c

STATE _____
DISTRICT _____
SCHOOL _____
TEACHER Lee
CODER _____

ENGAGEMENT RATE FORM

STATE # 03 SCHOOL # 08 DATE 5/29 GRADE 3

DISTRICT # 47 TEACHER # ___ CODER # ___ # STUDENTS PRESENT 16

PART OF CLASS OBSERVED
Beg. ✓
Mid. ___
End ___

	TIME	1 11:00	2 11:01	3 11:02	4 11:03	5 11:04	6 11:05	7 11:06	8 11:07	9 11:08
READING/LANGUAGE ARTS	ASSIGNED									
	MANAGEMENT/ TRANSITION									
	SOCIALIZING									
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING									
	OUT OF ROOM									
	TOTAL UNENGAGED									
	ENGAGED									
MATHEMATICS	ASSIGNED	16	16	16	16	16	16	16	16	16
	MANAGEMENT/ TRANSITION	9-16	15-16	10-15	1-2	1	2-3	2	0-3	2
	SOCIALIZING									
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING	0-3	0-1	0-4	0-1		3-4	0-1		2-3
	OUT OF ROOM									
	TOTAL UNENGAGED	12-16	16	14-15	1-3	1	6	2-3	0-3	4-5
	ENGAGED	0-6	0-2	0-4	11-16	13-16	8-12	11-16	11-16	9-14
	OTHER ASSIGNED									
	PULL OUT ASSIGNED									
	NO. OF STUDENTS PRESENT									

3/11/80

1T37d

KEY FOR 1V36b

	TIME	10 11:09	11	12	13	14	15	TOTAL	ENGAGEMENT RATE
READING/LANGUAGE ARTS	ASSIGNED								ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION								
	SOCIALIZING								
	DISCIPLINE								
	UNOCCUPIED/ OBSERVING								
	OUT OF ROOM								
	TOTAL UNENGAGED								
	ENGAGED								
MATHEMATICS	ASSIGNED	16						160	ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION	1						43-61	
	SOCIALIZING								
	DISCIPLINE								56-64%
	UNOCCUPIED/ OBSERVING	0-1						5-18	
	OUT OF ROOM								
	TOTAL UNENGAGED	1-2						57-70	
	ENGAGED	12-16						90-103	
	OTHER ASSIGNED								
	PULL OUT ASSIGNED								
	# STUDENTS PRESENT								

KEY FOR 1V36c

STATE _____
DISTRICT _____
SCHOOL _____
TEACHER Smith
CODER _____

ENGAGEMENT RATE FORM

STATE # 03 SCHOOL # 08 DATE 4-19 GRADE 1

DISTRICT # 47 TEACHER # ___ CODER # ___ # STUDENTS PRESENT 28

PART OF CLASS OBSERVED
Beg. ✓
Mid. ___
End ___

	TIME	1 11:00	2 11:01	3 11:02	4 11:03	5 11:04	6 11:05	7 11:06	8 11:07	9 11:08
READING/LANGUAGE ARTS	ASSIGNED	27	27	27	27	27	27	27	28	28
	MANAGEMENT/ TRANSITION	1-2	1-2		2	1	4	2-5	4-7	3
	SOCIALIZING	3-4	2	1-3				0-1		3-4
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING	3-7	3-8	0-6	5-8	6-8	4-7	5-10	4-9	2-6
	OUT OF ROOM				1					
	TOTAL UNENGAGED	8-12	7-11	3-7	8-11	7-9	8-11	10-13	10-14	9-12
	ENGAGED	13-21	14-22	18-26	14-21	16-22	14-21	12-19	12-20	14-21
MATHEMATICS	ASSIGNED									
	MANAGEMENT/ TRANSITION									
	SOCIALIZING									
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING									
	OUT OF ROOM									
	TOTAL UNENGAGED									
	ENGAGED									
	OTHER ASSIGNED									
	PULL OUT ASSIGNED	1	1	1	1	1	1	1		
	NO. OF STUDENTS PRESENT									

3/11/80

1T37f

	TIME	10 11:09	11	12	13	14	15	TOTAL	ENGAGEMENT RATE
READING/LANGUAGE ARTS	ASSIGNED	26						271	ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION	2-5						20-31	
	SOCIALIZING	3-5						12-19	
	DISCIPLINE								58-69%
	UNOCCUPIED/ OBSERVING	4-9						36-78	
	OUT OF ROOM							1	
	TOTAL UNENGAGED	13-14						83-114	
	ENGAGED	10-15						157-188	
MATHEMATICS	ASSIGNED								ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION								
	SOCIALIZING								
	DISCIPLINE								
	UNOCCUPIED/ OBSERVING								
	OUT OF ROOM								
	TOTAL UNENGAGED								
	ENGAGED								
	OTHER ASSIGNED	2							
	PULL OUT ASSIGNED								
	# STUDENTS PRESENT								

NOTES

F.6. Demonstration of mastery on Engagement Rate Form

The following pages include answer keys for videotape segments of three classrooms. These keys provide the correct categorization for each student for each observation.

Each answer key includes the number of students present; a diagram showing the order of coding, location, and classification of each student; and the reasons for classification of all unengaged students. Students out of the room are also indicated. The location of each student is shown by a number and a letter; the number indicates the sequence in which students are coded, while the letter(s) indicates the behavior category. For example, on observation #1 for classroom A, student 2E/U is the second student coded; he is located in the desk nearest the camera in the first row and is coded as either engaged or unoccupied, since he is looking at his book at first and then looks across the room. The behavior codes are as follows:

E -- Engaged
M -- Management/Transition
S -- Socializing
D -- Discipline
U -- Unoccupied/Observing
Ao -- Assigned Other

The specific behavior of each unengaged student is described for each observation. Where the categorization of a student may vary, this is indicated by a slash. Thus, student 7E/U is the seventh student coded, and he/she may be coded as either engaged or unoccupied/observing. This may happen if the student changes behaviors during the time an observation can be made.

Two symbols are used on the picture to help observers:

Empty desk

* Student has already been coded but has moved; do not code again (e.g., *8 -- this was the eighth student coded; although he/she appears on screen again, skip him/her)

Note: Adding the minimums or maximums for the individual unengaged categories in an observation does not always yield the minimum or maximum for the total number of unengaged students, since some students may be coded in one of two or three unengaged categories (e.g., M/U).

F.6.--Continued

TEACHER COMMENTS FOR 1V36a

"What's a billfold? It's another name for a? ... A wallet, good. ... And so Marybeth's father agreed to buy him something. Ok, let's go to page one-twenty-six. ... Kim. ... Vet... What's that word, vet, mean? ... Ok, the dog is in the dog pound. Now who takes care of the dog? ... The doctor... He is called a? ... Veterinarian, right."

Observation #1

"Be sure to remember, vet, ok. ... Eight, eight dollars. ... Very good, Karen. ... All right now, stop there. This is all part of having a dog, puppy, ok. All right, Rosa... Gory... You're... That's... Silly, isn't that? ... Thank you. ... All right, they decided on what, Jeanne Bottom? ... Penny, all right, that's one of the things, that's easy to call once you have decided on the name to call the pet. You decide what made him call him that. Ok. All right now, what we're gonna do is, is, for now I want you to go back to your seat. I want you to sit around this side here. This side, not that side, ok? This side so you have enough room. Look on the board and see what you have to do. I have three dittos I'm going to give you in a minute."

Observation #2

"I want you to complete pages 41, 43, and 44. The second thing I want you to do is to copy the new spelling words. Those right there. There are ten of them. ... They are words for the next story. This story here. ... No, the other ones, here. Ok, the third thing I want--are you listening, Albert? ... is to do some extra writing. How are we going to find time to do that? All right, what I want you to do now is this. Ok. Go back. Sit along here. Get a pencil out and do these three dittos. As soon as you complete all three, staple them and put them on my desk. They are not due today. They are due Monday. Ok? ... As soon as you do that you move along and what do you do? Ron? ... Number two. Yes, and when you are all done with that you can go to your SRA folders. Ok, go right around here. Go this way... By Monday... Ok, Stephen, I want you to go to that side there next to Ronald. ... All right, for you people up here, if you are not done with the ditto I gave you--are you listening? Go to the story. Put aside and go on to the story. Go to the beginning of the story. If you are reading it already, I notice Veronica is, that's ok, keep reading it."

F.6.--Continued

TEACHER COMMENTS FOR 1V36a--CONTINUED

Observation #3

"Ok, I'll pass these out to you. I have two papers here. As I give them to you now the first thing I want you to do with them is what? ... Albert, would you like to sit over there? There's more room. Ok. It's not gonna last... Put your name on it. ... Put your name on it. Turn that chair around back. Carol... All right, we will go over each one together real quickly. People up front there keep reading that story. I'll be with you in a second all right. We're going to begin from the very beginning. All right, everybody look at the last one I gave you. The one, you should be writing your name on it right now, at the top. Look at the bottom at the one that is page 43. Can you see that one? ... 43. Now this is similar to one you did yesterday. It deals with vocabulary in deciding which word will best complete the sentence. Now when you come across a word what do you always do? ... A word you don't know? Look it up. Ok."

Observation #4

"Let's look at #5 for a minute 'cause that ink there really spread. It's hard to see that one word. Look at #5. Who will read it for me? Albert, will you read #5 please? Read the sentence to me. ... Now, the word on top is b-o-i-l. What is that? ... Boil. So if you want to copy that, copy it with your pencil. B-O-I-L. It looks like what? ... B-o-l-l. But it's an accident. It's i-l. It looks like that. It's i-l, I'm telling you now, it is i-l. All right. That goes for #10 also. Now read that, Joe. #10 ... What's that word? not stew... Saw, ok? ... What's that word there? ... That word there is also boiling, b-o-i-l-i-n-g... boiling... Do you understand this now? ... Ok. Let's go on to the next one so that you understand. It's on page 44. The one with the block on it. See it? ... See that? The block? Now here, here again using a lot of the same words. Look at the words at the top of the paper. Read the words for us there, Ron, at the top of the paper. ... Second word, Albert. ... Annoy, all right. You know what that word means. Stop annoying me. Don't annoy me. You know what that means, ok. How about the next word? ... World. Ok, next word... Destroy. Next word ... Grange ... Now using those words complete the boxes, all right? And the blanks below that. Look at #1. This means to break. Raise your hand for me. Which word up there means to break? ... Destroy, so the "d" goes where? ... and the rest of the blocks go with each letter. ... What do you think you do with that word? ... Look at the bottom of the sheet."

F.6.--Continued

TEACHER COMMENTS FOR 1V36a--CONTINUED

Observation #5

"At the bottom, right. If you get the right word, you look at all the letters in that block, make up a word in itself and they go down here. So make sure you get the right ones. All right let's go on to the next sheet now. That is page 41. It also is dealing with vocabulary words. Now this one here is something else. This is determining the order in which something happens in a story. This is more difficult, ok. ... Like what events happen when. Ok ... ok, now, Bob. Ok? All right. It says put the following stories' sentences in order. How would you number them in order? Underline signals. Signals means words that kind of tell you when the things happened. Look at #1; it's done for you already. Albert, what's a signal? ... What's the underlined part? ... Read that to me. ... at eight o'clock... Ok, that tells you when something happened right there. It tells you what time of day. That's the first thing that happened that day. Read the rest of the story, Albert. ... Now read louder, the one you were reading. All right, that was the first thing that happened. All right. Now you want to see what happened next. What it does for you is it gives you signal words. It gives you a word that kind of lets you know what happened next. Ok, what do you do with the signals? You underline them, the signal words. Then you put the number next to the sentence as you think they happened in the story, ok? Like what would you say happened next? ... All right, ten in the morning, ok. And the signal words would be ten in the morning. So that tells you when it happened."

Observation #6

"So what would you connect to that sentence? What number? ... Two. That happened next. All right, so why don't you do the other two first and then go back to this if you like. What will you be doing after this, Dan? If you complete these three? ... And put it on my desk, then what? ... Ok, but take your time with the papers. Let's not rush through these. Ok, any questions? Come up here and I'll answer any questions for you. Are there names on every one? ... Ok. Ok. People up here. Let's turn to the beginning of the story. I think a lot of you have been reading it already and you have an idea of what the story is about. What is the name of the story, Dick? ... Communication--Just Words. What does communicate mean? Who can tell me that? I'm communicating, what am I doing? ... All right, they tell you they what? ... They are happy. Are they saying anything to you or are they just smiling? Right. That's a facial, a sign, that you are happy. What's another way of communicating? From one to another... Talking. All right, what is another way of communicating? ... Hands, some people communicate by hands. Ah, how about like, um, the way a person walks can you tell if they are nervous or something like that. ... Ok, all right, good. What other things? ... How they sit. How they sit. Always moving around. What, are they usually nervous...maybe upset about something. Ok, suppose we

TEACHER COMMENTS FOR 1V36a--CONTINUED

Observation #6--Continued

see someone crying? Could be two things... They're upset about something. What else? Someone's crying. Some people cry over what? ... They got hurt. Some people cry because they are happy. They're crying so much they're happy."

Observation #7

"They are so overwhelmed with joy. All right, these are ways of communicating. Ok. Let's read the story and the vocabulary words that are on the board here. Let's look at them. Number one is what? ... Number... Not communication, but communicate. #2. ... #3. ... #4. ... 5. ... #6. ... It's a different kind of die - It's the second die. Ok. #7. ... marvel, not marvelous, but marvel. 8... Dial, 9... system, 10... 11. ... It's a hyphenated word. Ok, and 12... All right now, you'll see some of those words plus more new words that I'll give you next week in the story. Ok, all right, who wants to begin reading? Veronica, ok, let's start reading on page 140... Ok, continue... Ring the doorbell. Good... All right. Who else would like to read? Lesley. All right, remember the beginning, what the title is? Communication--Just Words. Go ahead... Ok, Leslie, another paragraph." ...

Observation #8

"All right, good. ... (PA announcement) Complete that for us, Kathy. Kathy... Ok... siren... You're right. ... Often what they tell."

Observation #9

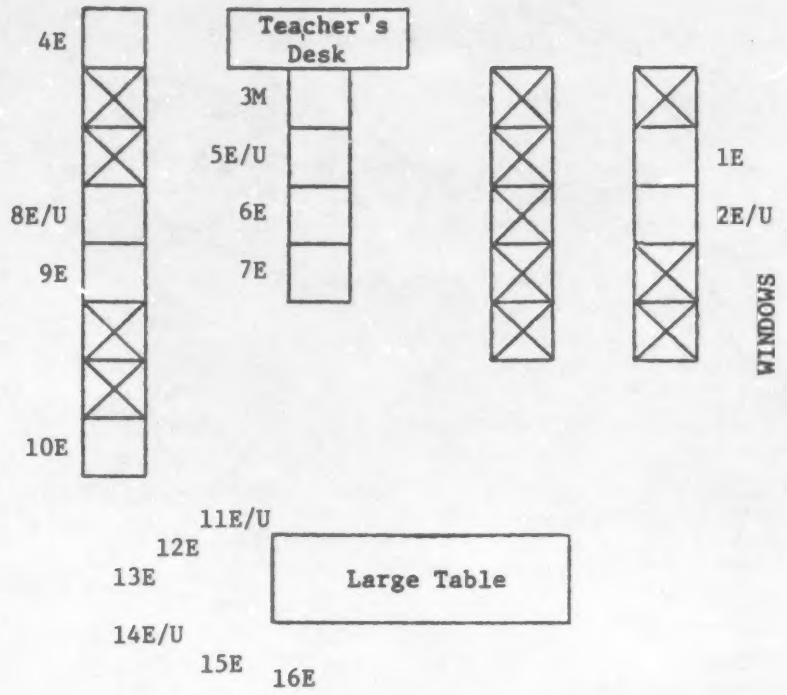
"Ok, good. ... Very good, Kathy, very good. Would someone else like to read? Herb? ... What's that word? without...uttering. Good. ... By the look on their faces... Ok, good, thank you. ... Who else would like to read? ... Phillip Drury, all right..."

Observation #10

"Is your name on it? ... What's that? ... All right. Ok... Not painters, but--ok, stop there. ... Maureen... continue reading..."

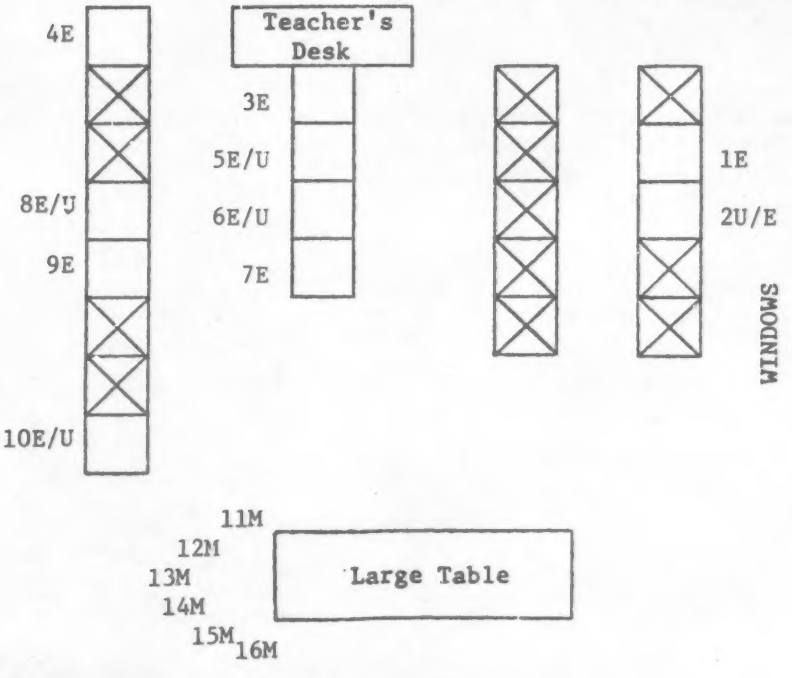
F.6.--Continued

Observation #1--16 students



2E/U--Looking at book or looking across room
3M--Moving papers around
5E/U--Looking at book or looking at neighbor
8E/U--Looking at book or looking around
11E/U--Looking at book or looking across room
14E/U--Looking at book or looking around

Observation #2--16 students



2U/E--Looking around or looking at book
5E/U--Looking at book or looking at camera
6E/U--Looking at book or looking at camera
8E/U--Looking at book and looking around room
10E/U--Looking at book or looking at reading group
11M, 12M, 13M, 14M, 15M, 16M--Returning to seats

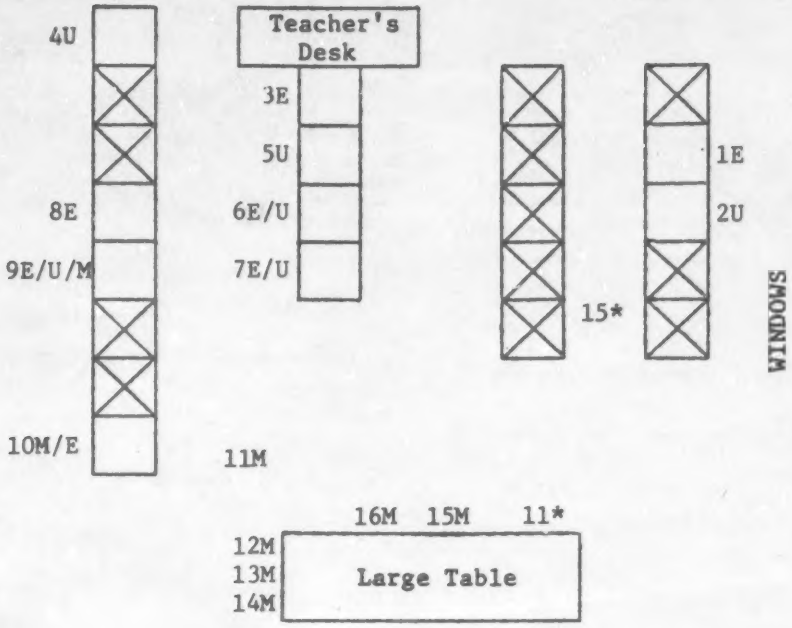
☒--Empty Desk

*--Already counted; do not code

ANSWER KEY FOR 1V36a

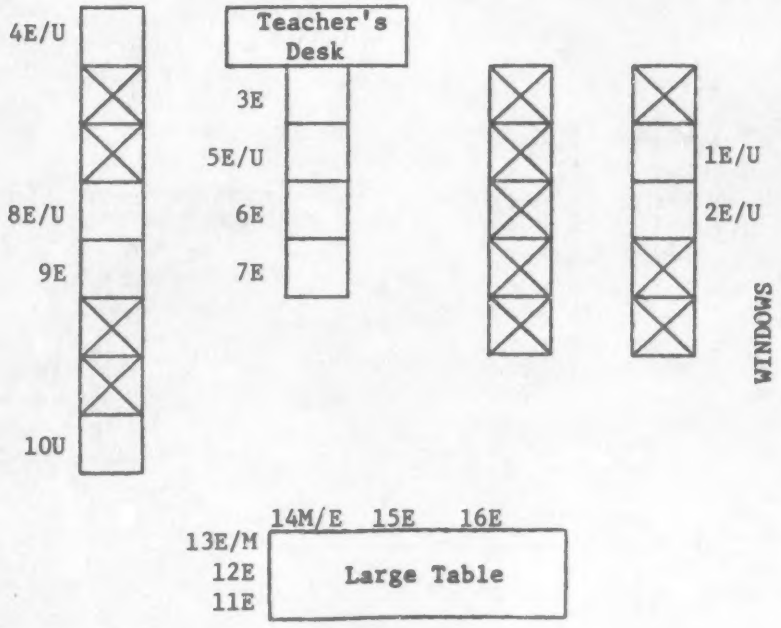
F.6.--Continued

Observation #3--16 students



2U--Looking across room
4U--Looking around
5U--Looking around
6E/U--Looking at book or looking across room
7E/U--Looking at book or looking across room
9E/U/M--Looking at book, looking around, or flipping pages in book
10M/E--Turning pages in book or looking at book
11M--Walking to seat
12M, 13M, 14M, 15M, 16M--Putting headings on papers / Walking to seat or putting heading on papers

Observation #4--16 students



1E/U--Looking at book or looking around
2E/U--Looking at book or looking at neighbor
4E/U, 5E/U--Looking at book or looking around
8E/U--Looking at book or looking around
10U--Looking around
13E/M--Writing on paper and waiting for teacher
14M/E--Fixing papers or looking at paper

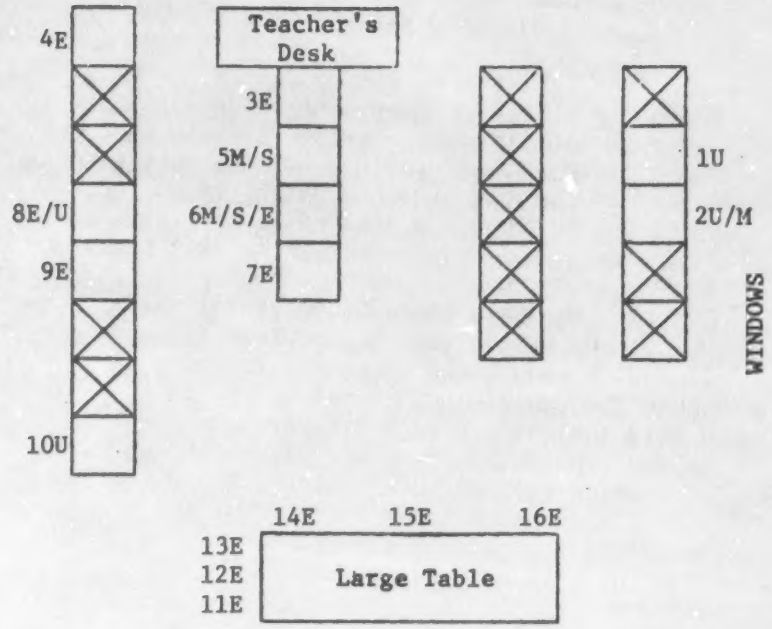
⊠--Empty Desk

*--Already counted; do not code

ANSWER KEY FOR 1V36a

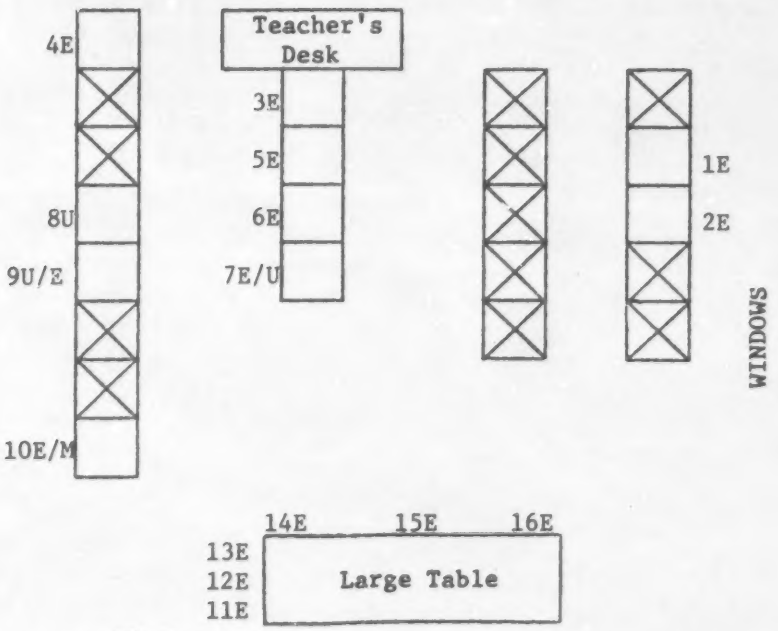
F.6.--Continued

Observation #5--16 students



1U--Looking at camera
2U/M--Looking around or turning pages in book
5M/S--Turning pages in book or talking to neighbor
6M/S/E--Turning pages in book, talking to neighbor, or looking at book
8E/U--Looking at book or looking around
10U--Looking around

Observation #6--16 students



7E/U--Looking at book or looking at camera
8U--Looking around
9U/E--Looking around or looking at book
10E/M--Looking at book or teacher giving nonacademic directions

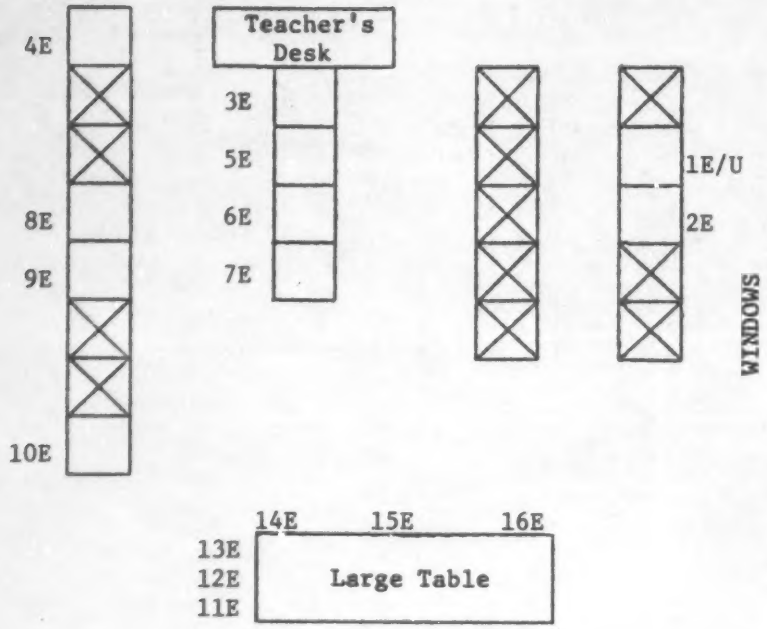
⊠--Empty Desk

*--Already counted; do not code

ANSWER KEY FOR 1V36a

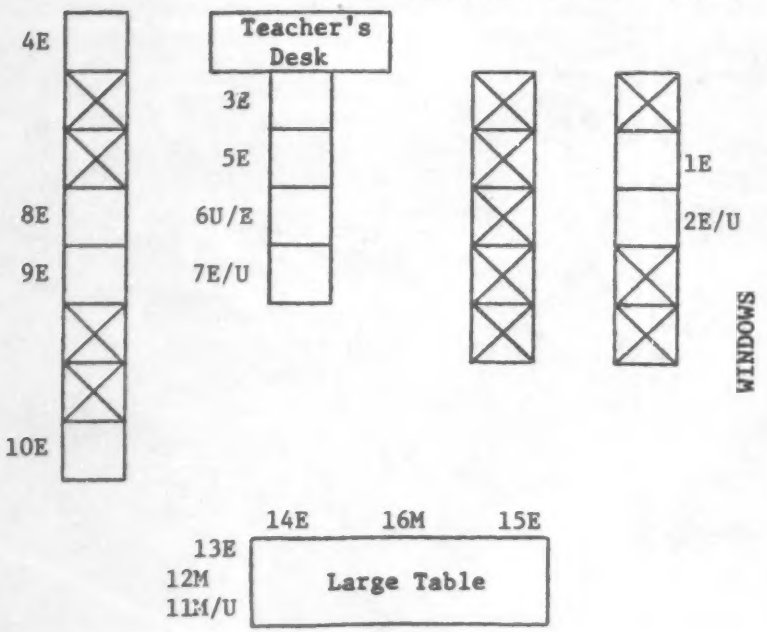
F.6.--Continued

Observation #7--16 students



1E/U--Looking at teacher or looking around

Observation #8--16 students



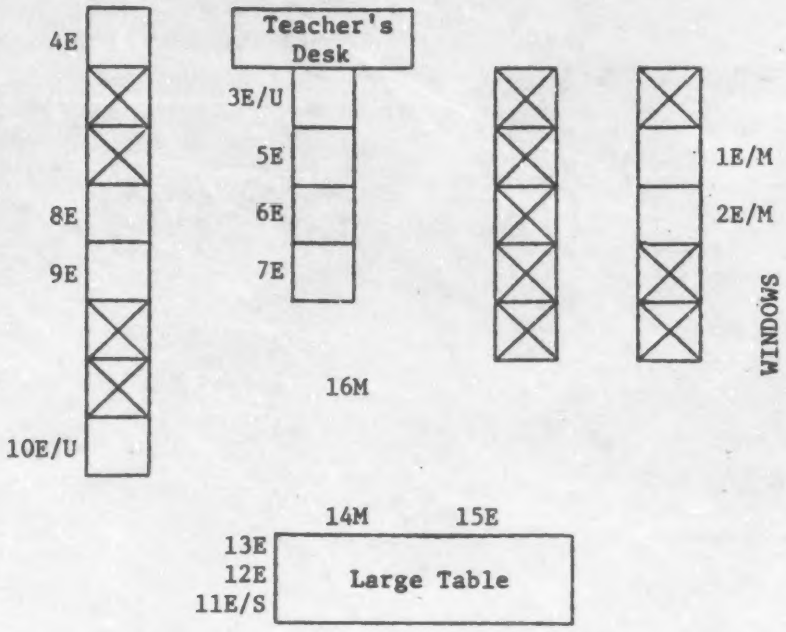
2E/U--Looking in book or looking at camera
6U/E--Looking around or looking in book
7E/U--Looking in book or looking around
11M/U--Turning pages or looking around
12M--Walking to teacher's desk
16M--Returning to seat

⊠--Empty Desk

*--Already counted; do not code

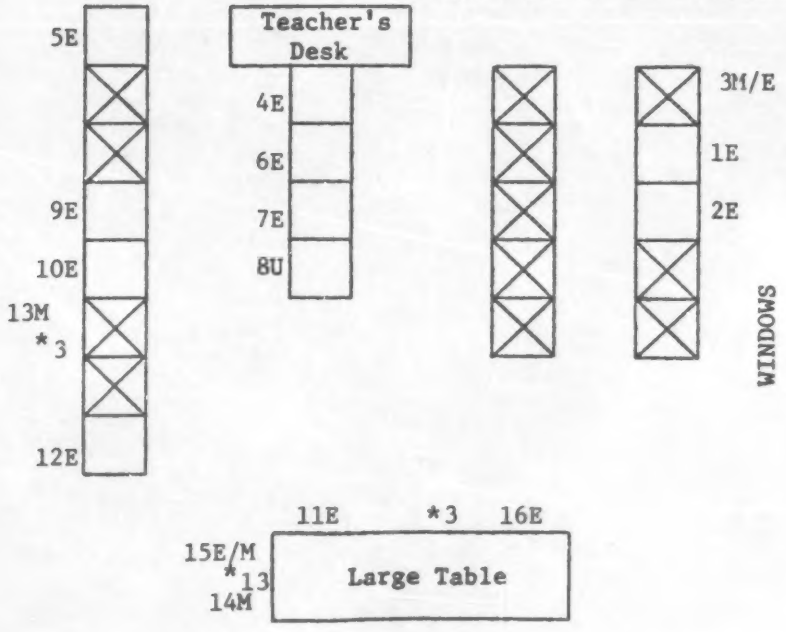
F.6.--Continued

Observation #9--16 students



1E/M, 2E/M--Looking at book or waiting for next student to read
3E/U--Looking at book or looking across room
10E/U--Looking at book or looking around
11E/S--Looking at board, looking at paper, or talking
14M--Putting papers in order
16M--Returning papers to teacher's desk and returning to seat

Observation #10--16 students



3M/E--Walking to teacher or talking with teacher
8U--Looking around room
13M--Walking to learning center
14M--Putting papers away
15E/M--Looking at papers or turning papers

☒--Empty Desk

*--Already counted; do not code

3/11/80

F.6.--Continued

TEACHER COMMENTS FOR 1V36b

Observation #1

"When that's done, you're each going to get one of these multiplication worksheets that we've been working on, with the riddle at the top. . . . We're also going to go over the two-digit multiplication . . . you remember . . . right, um-hum, this type . . . all right . . . right . . . all right . . . When that's finished and in my wooden box - don't forget your name again - you're to go and find your measurement box, please. If you finish all that you are to do in there and your worksheet is out of your box, then just put it on the table."

Student: "What about Mrs. Hausel's group, we don't have a box yet?"

Observation #2

"All right, well then, of course, that will be with you. You don't have to be concerned about that. Question, Doug?"

Student: "Can we keep the boxes?"

". . . No, I use those every year. I'm sorry . . . All right, the next thing is free activity and I think you can tell me what ideas I have. Bobbie Jo . . . The elephants, ok, the Elephant Timers - and if you use that, will you share please? Now you know, if you have the box, share with someone else. Anything else you can think of? Greg, let's not . . ."

Student: "Do our multiplication cards."

Observation #3

". . . All right, there are flashcards in the back. Very good. So I don't think we should have any trouble finding something to do if you're all finished. Ok, I'll have your papers passed out in a minute and then you can be finishing your work. Megan, I would like you to finish this exercise . . . (indecipherable) . . . Rusty, would you close your workbook please because these two need to be finished first. . ."

Observation #4-#9

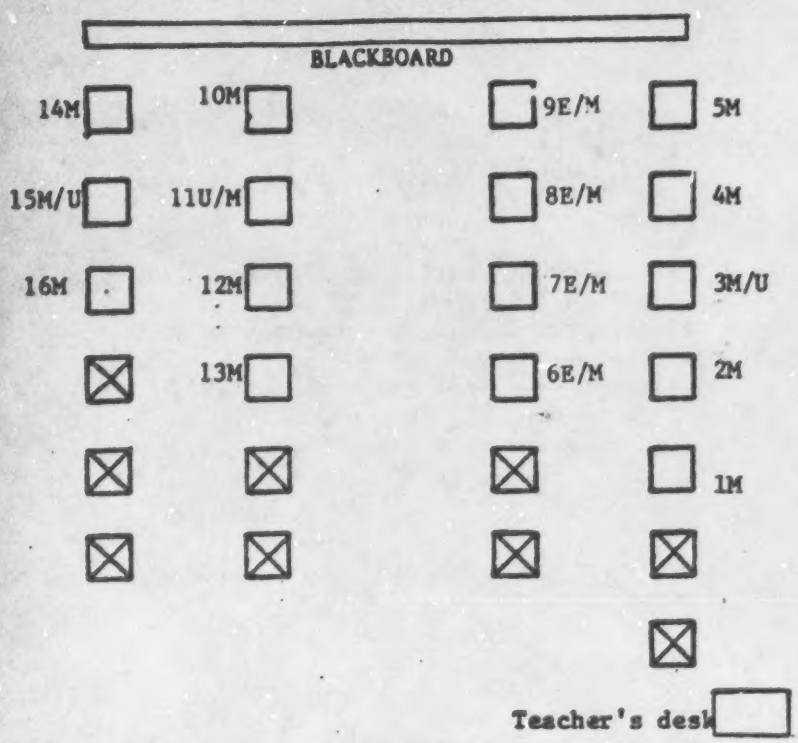
The teacher is working with individual students.

Observation #10

"You can't put the answers in until you add them."

ANSWER KEY FOR 1V36b

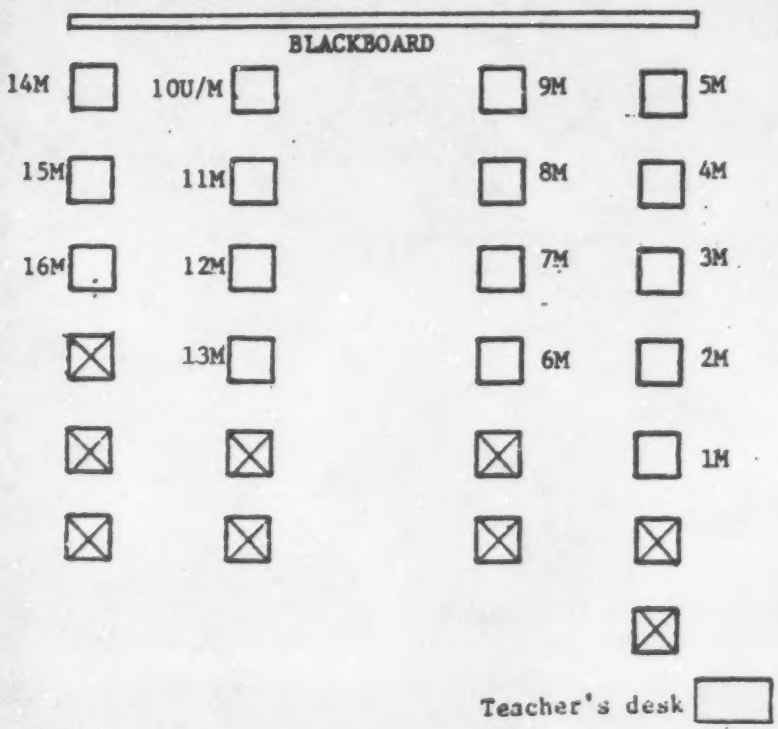
Observation # 1 - 16 Students



The teacher is giving nonacademic directions throughout most of the observations.

1M, 2M, 16M--Looking at teacher give directions
3M/U--Listening to directions or looking at camera
4M, 5M, 10M--Looking at teacher give directions
6E/M, 7E/M, 8E/M, 9E/M--Looking at teacher give example or nonacademic directions
11U/M--Looking at hands or at teacher give directions
12M, 13M, 14M--Looking at teacher give directions
15M/U--Looking at teacher give directions or at student #14

Observation # 2 - 16 Students



The teacher is giving directions throughout the observation (no academic content).

1M, 2M, 3M--Looking at student asking question about directions
4M, 5M, 6M, 7M, 8M, 9M--Looking at teacher give directions
10U/M--Staring at desk or looking at teacher give directions
11M, 12M--Looking at teacher give directions
13M--Looking at teacher give directions or turning pages in book
14M, 15M, 16M--Looking at teacher give directions

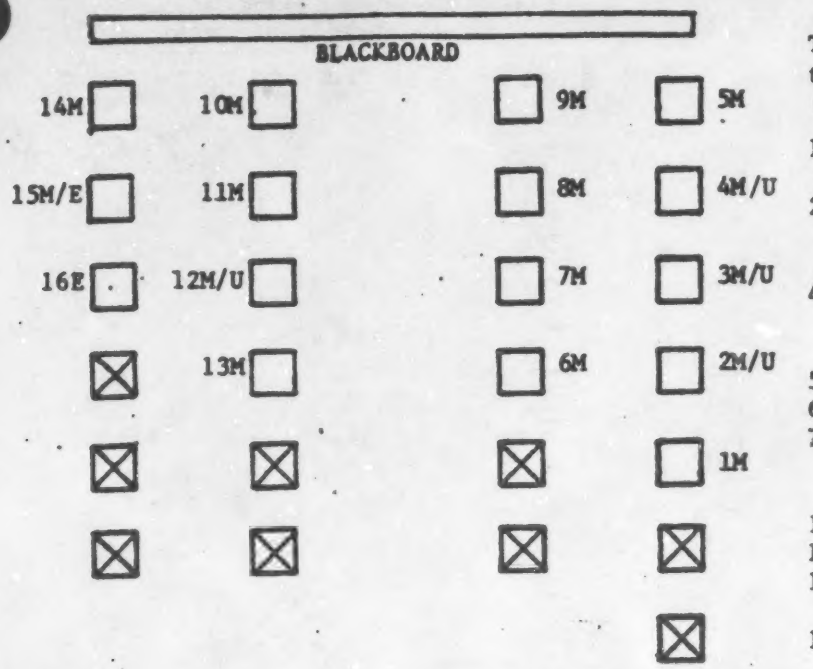
KEY:

Empty Desk

* Already counted; do not code

ANSWER KEY FOR 1V36b

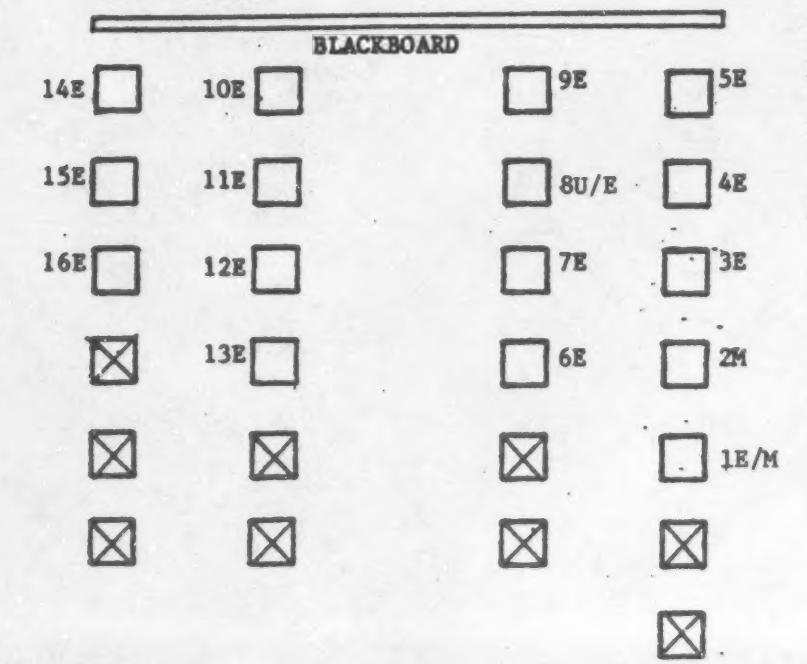
Observation # 3 - 16 Students



The teacher is giving directions throughout the observation (no academic content).

1M--Looking at teacher give directions
2M/U, 3M/U--Looking at teacher give directions or looking around
4M/U--Looking at teacher give directions or looking at camera
5M--Waiting for papers
6M--Turning pages
7M, 8M, 9M--Getting ready for next activity
10M--Waiting for papers
11M--Turning pages
12M/U--Turning pages or looking at neighbor
13M--Looking at teacher give directions
14M--Turning pages
15M/E--Looking at teacher give directions or writing

Observation # 4 - 16 Students



1E/M--Working in workbook or getting worksheet
2M--Sitting down and sorting papers to get ready for activity
8U/E--Looking at camera or writing

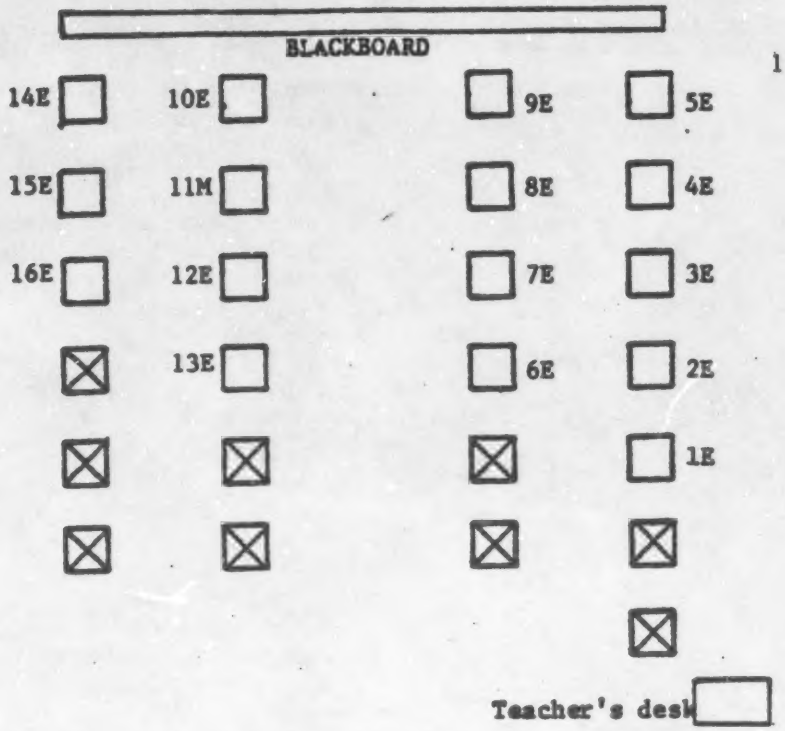
KEY:

Empty Desk

* Already counted; do not code

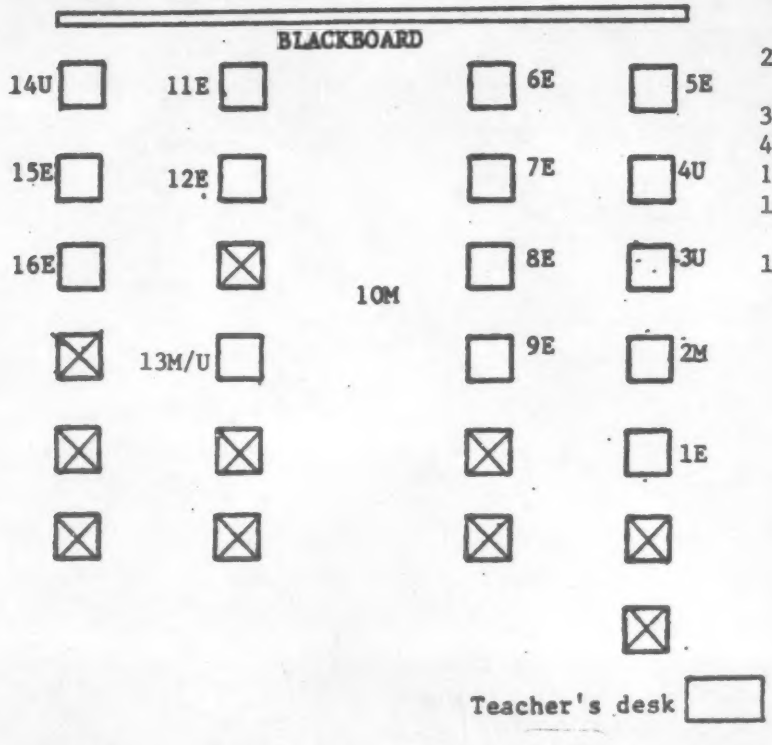
ANSWER KEY FOR 1V36b

Observation # 5 - 16 Students



11M--Walking to teacher for help

Observation # 6 - 16 Students



2M--Taking workbook to teacher's desk
3U--Looking at camera
4U--Looking at student #2
10M--Getting materials
13M/U--Picking up paper or looking around
14U--Staring into space

KEY:

☒ Empty Desk

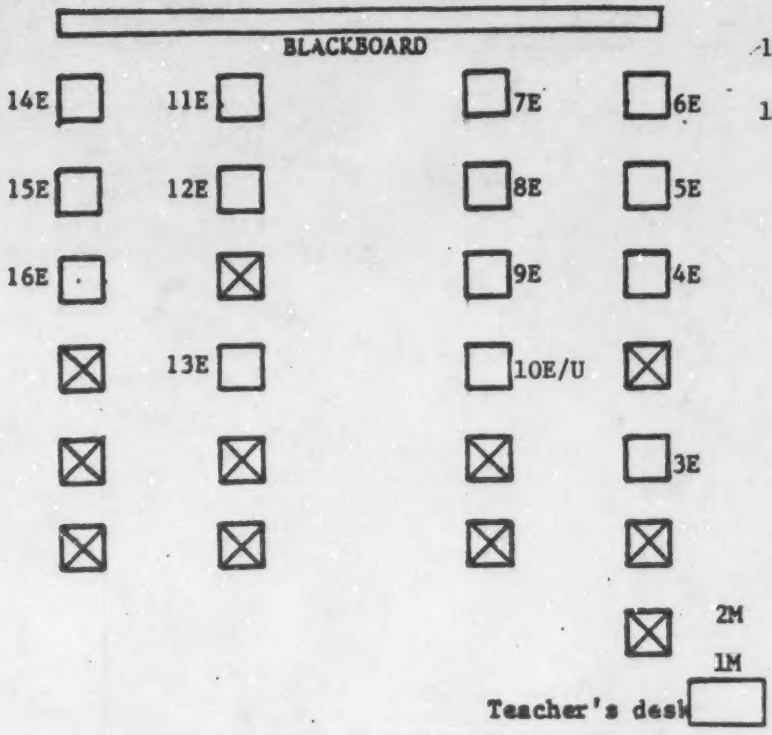
173

* Already counted; do not code

F.6.--Continued

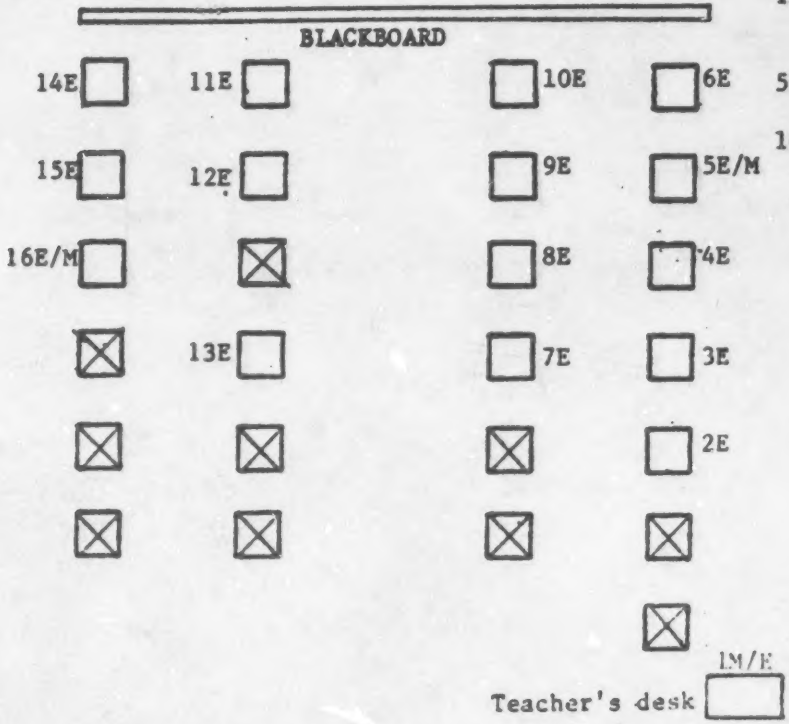
ANSWER KEY FOR 1V36b

Observation # 7 - 16 Students



1M, 2M--Waiting for teacher's help
10E/U--Writing or staring across room

Observation # 8 - 16 Students



1M/E--Watching teacher correct workbook or getting help from teacher
5E/M--Writing; then stands up to get work checked
16E/M--Writing; then goes to teacher's desk

KEY:

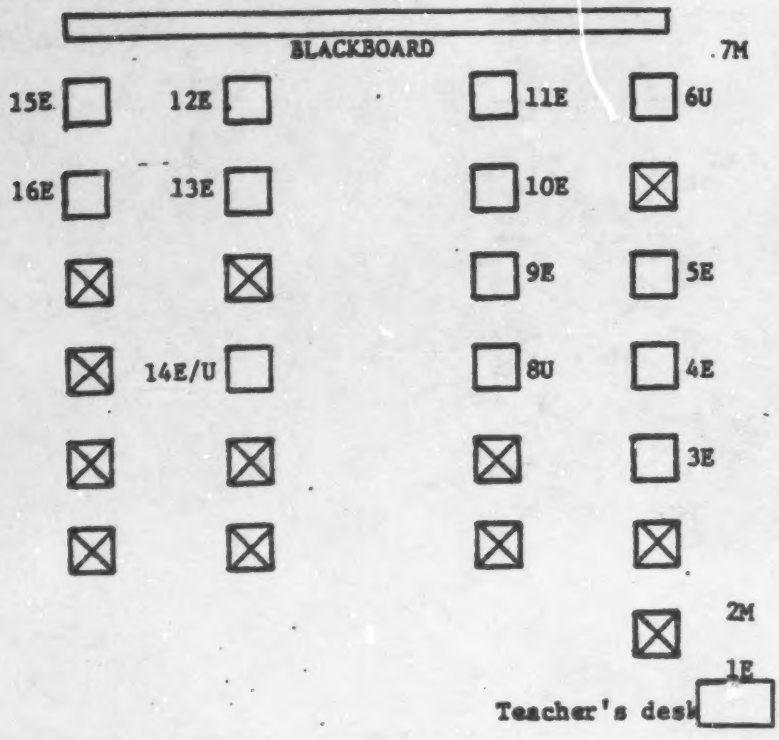
Empty Desk

* Already counted; do not code

F.6.--Continued

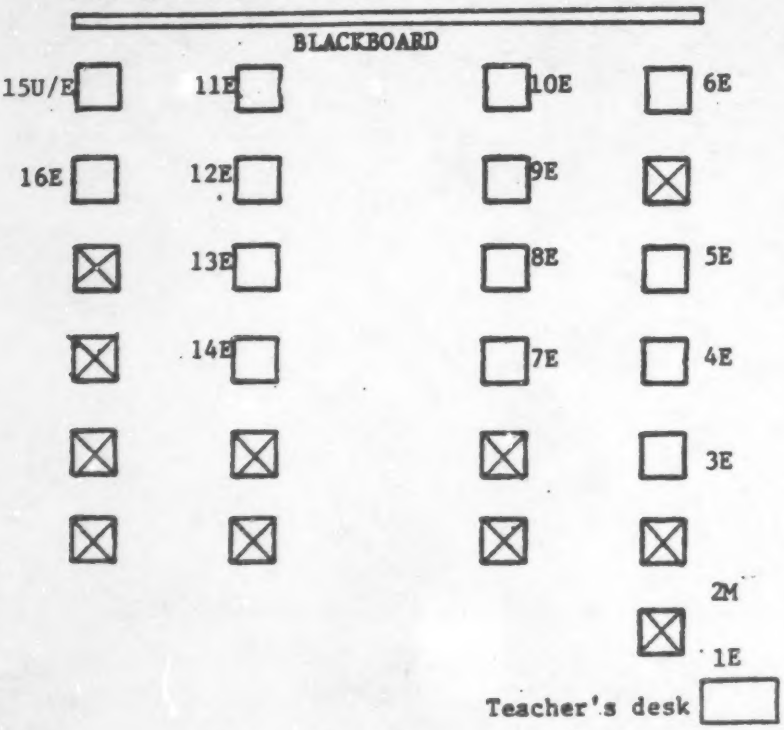
ANSWER KEY FOR 1V36b

Observation # 9 - 16 Students



2M--Waiting for help from teacher
6U--Looking around
7M--Getting measurement box
8U--Staring across room
14E/U--Looking at paper/ playing with pencil or smiling at camera

Observation # 10 - 16 Students



Teacher is explaining incorrect answer.

1E--Listening to teacher's explanation of incorrect answer
2M--Waiting for help from teacher
15U/E--Looking around or at book

KEY:

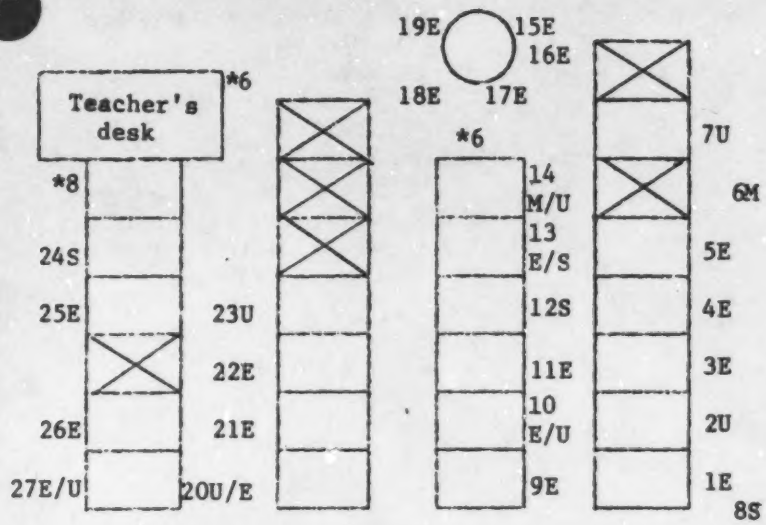
Empty Desk

* Already counted; do not code

F.6.--Continued

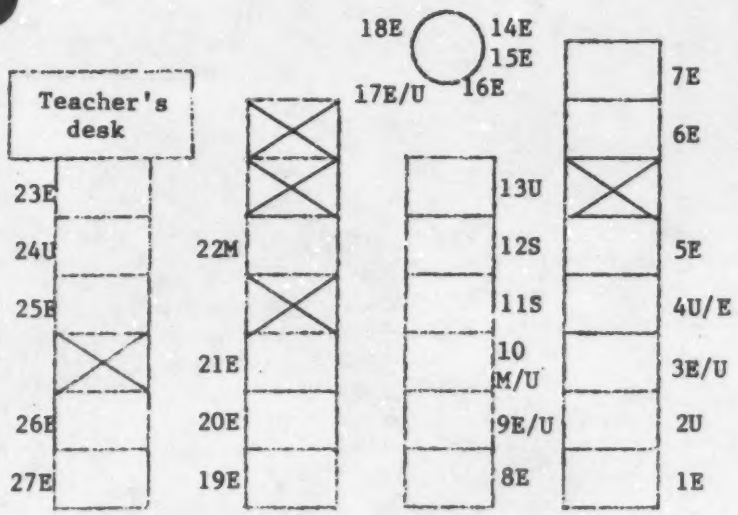
ANSWER KEY FOR 1V36c

Observation #1--27 students, 1 pullout



2U--Staring with hands over face
6M--Walking to get materials
7U--Looking at student #6 walking
8S--Talking to student #1
10E/U--Looks down at floor or lap briefly
12S--Talking to student #13
13E/S--Talking to student #12
14M/U--Asking student #6 for paper or looking around
20U/E--Looking at paper
23U--Watching reading group
24S--Talking to student #8 walking
27E/U--Looking around or looking at paper

Observation #2--27 students, 1 pullout



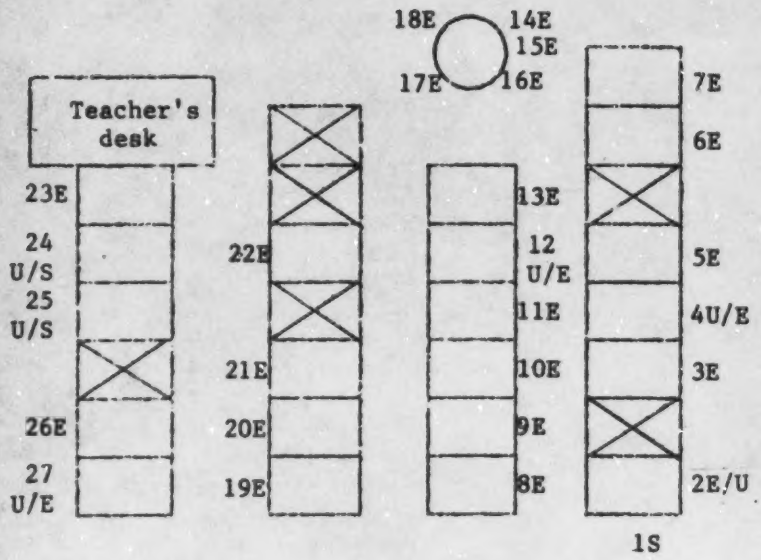
2U, 13U--Looking around at reading group
3E/U--Staring at paper
4U/E--Looking at neighbor or at paper
9E/U--Looking at paper or camera
10M/U--Returning to desk or watching student
11S, 12S--Talking
17E/U--Looks up at camera briefly
22M--Walking back to desk
24U--Looking around

-- Empty desk -- Table * -- Already counted; do not code

F.6.--Continued

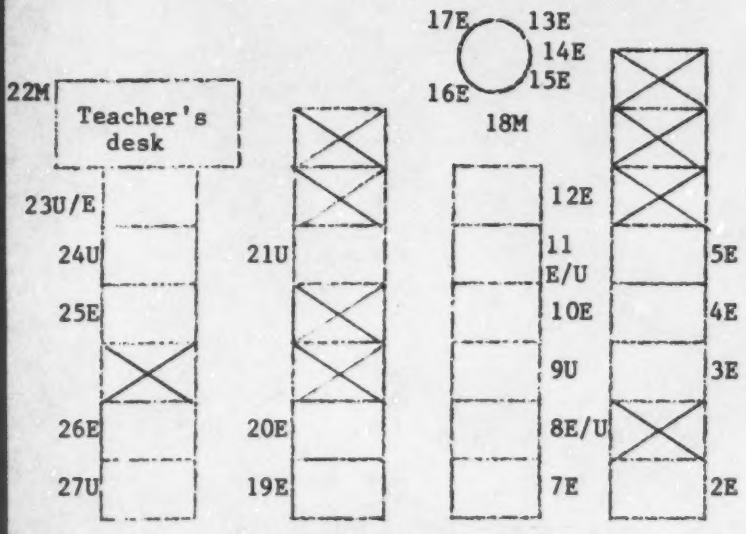
ANSWER KEY FOR 1V36c

Observation #3--27 students, 1 pullout



1S--Talking to student #2
2E/U--Looks up at camera briefly
4U/E--Looked up at camera briefly
12U/E--Looking at reading group
24U/S--Playing with pencil or socializing
25U/S--Looking at camera or socializing
27U/E--Looking at student #26 or reading group or writing

Observation #4--27 students, 1 pullout



1--Out of room
6U--Wandering around with no apparent purpose
8E/U--Looking at camera; then looking at paper
9U--Looking at neighbor's paper
11E/U--Looking at reading group
18M--Walking to desk
21U--Looking at camera
22M--Sharpening pencil
23U/E--Looking at student #22 or at paper
24U--Looking at reading group
27U--Looking at student #26's paper

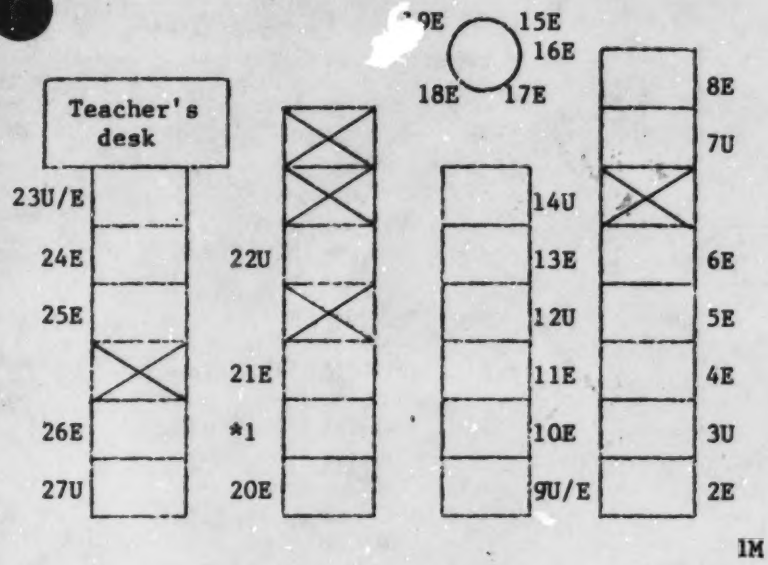
1 - out of room

-- Empty desk -- Table * -- Already counted; do not code

F.6.--Continued

ANSWER KEY FOR 1V36c

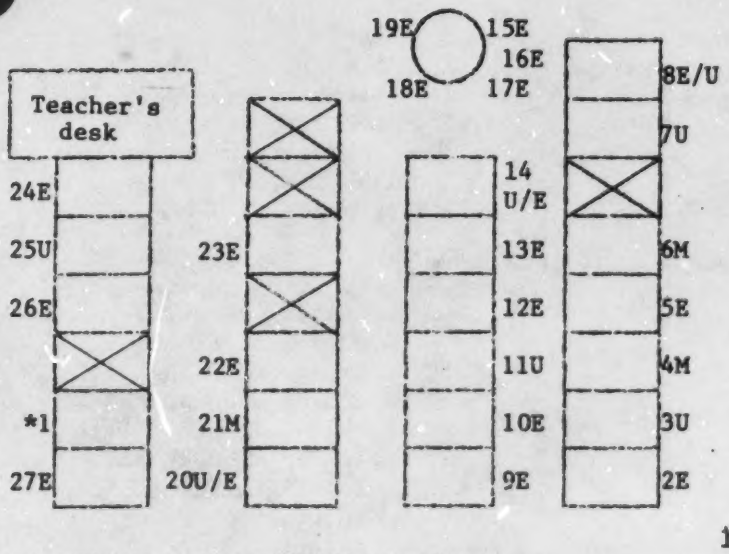
Observation #5--27 students, 1 pullout



7U, 14U, 22U--Looking at reading group

1M--Getting a drink of water
3U--Looking at camera
9U/E--Could be looking at reading group or at paper
12U--Staring and playing with nose
23U/E--Looking at reading group or writing
27U--Looking at camera

Observation #6--27 students, 1 pullout



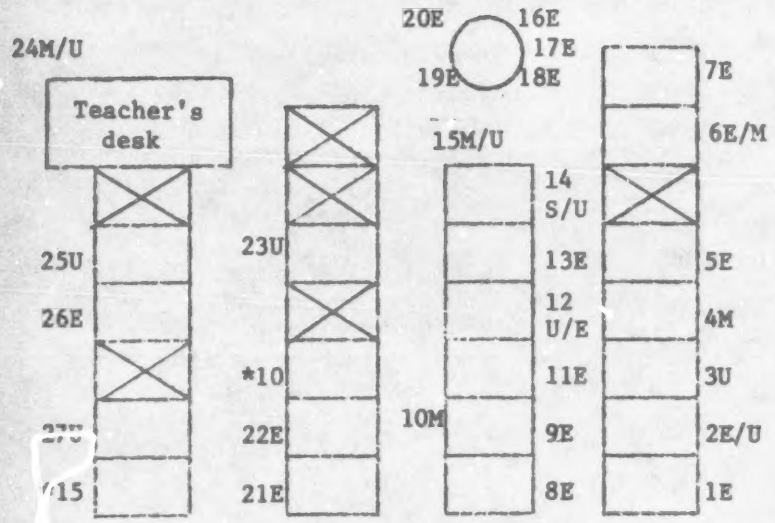
7U--Looking at reading group
1M--Getting a drink of water
3U--Yawning and looking around
4M--Changing papers
6M--Getting up for paper
8E/U--Looks up at reading group briefly
11U--Scraping at top of desk
14U/E--Looking at camera or writing
20U/E--Looking at reading group or writing
21M--Getting crayon
25U--Playing in desk

-- Empty desk -- Table * -- Already counted; do not code

F.6.--Continued

ANSWER KEY FOR 1V36c

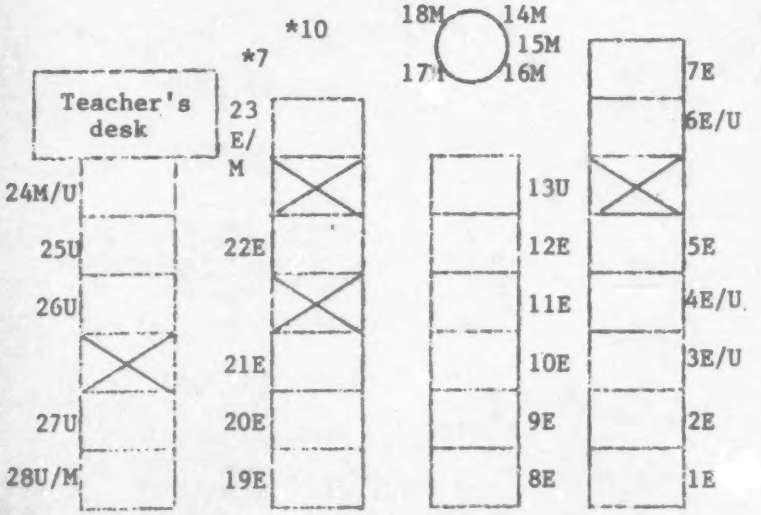
Observation #7--27 students, 1 pullout



7U, 23U, 27U--Looking at reading group

4M, 15M--Getting materials
2E/U--Looks around briefly
3U--Staring
6E/M--Writing or looking for materials
10M--Walking to water fountain
12U/E--Looking at camera or paper
14S/U--Giggling or looking at board
15M/U--Walking to get materials or wandering
24M/U--Getting materials or wandering
25U--Playing under desk

Observation #8--28 students



3E/U--Looks at reading group briefly
4E/U--Looks up at camera
6E/U--Looks up briefly
13U--Looking at reading group
14M, 15M, 16M, 17M, 18M--Turning pages in books

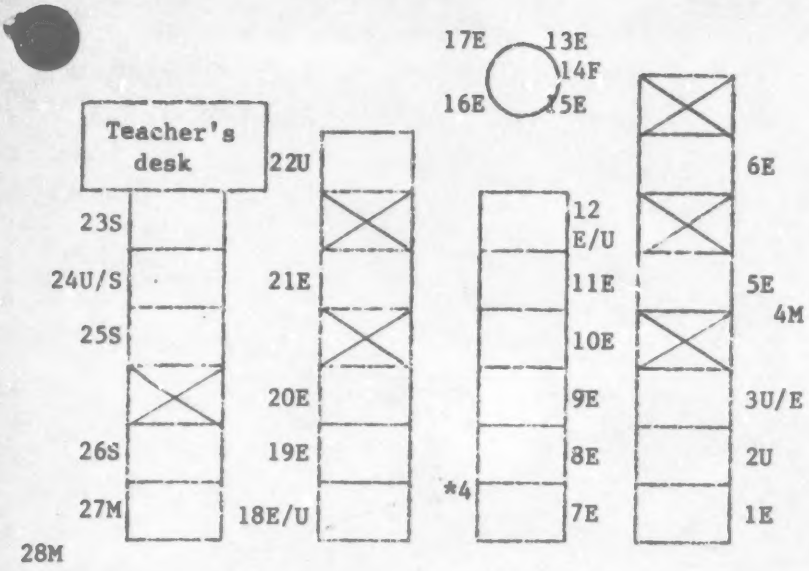
23E/M--Looking at book or turning pages
24M/U--Getting materials or wandering around
25U--Playing under desk
26U--Watching student #27 or #28
27U--Watching student #28
28U/M--Looking at camera or putting away materials

-- Empty desk -- Table * -- Already counted; do not code

F.6.--Continued

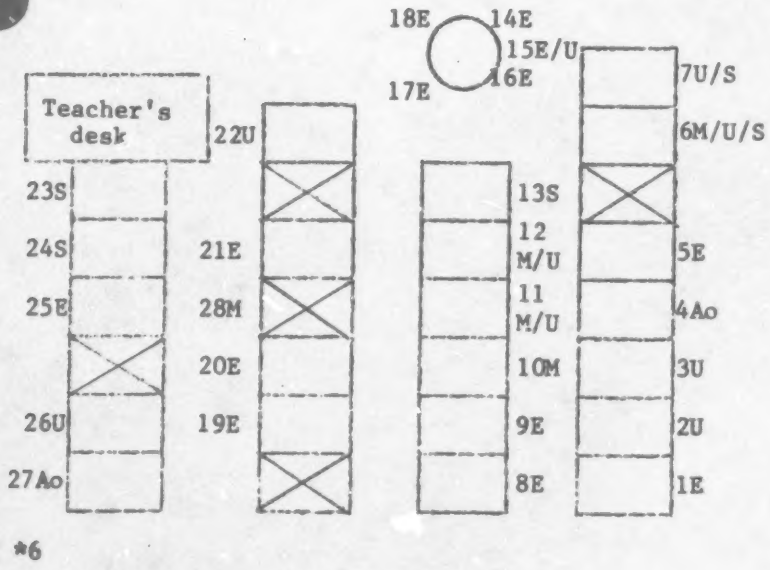
ANSWER KEY FOR 1V36c

Observation #9--28 students



2U--Looking at camera
3U/E--Looks up briefly
4M--Walking to get materials
12E/U--Looking at board or writing
18E/U--Looks up briefly
22U--Looking around
23S--Talking to student #24 under desk
24U/S--Playing under desk or socializing
25S, 26S--Talking
27M, 28M--Getting materials

Observation #10--28 students



2U--Looking at student #1
3U--Looking at reading group
4Ao, 27Ao--Doing free-time activity
6M/U/S--Getting ready to work, looking at camera, or socializing
7U/S--Looking at camera or socializing
10M--Putting crayon away
11M/U, 12M/U--Getting materials or playing
13S--Talking to student across room
15E/U--Looks up briefly
22U--Playing with pencil
23S--Talking to student #24 under desk
24S--Talking to student #23
26U--Stretching and looking at camera
28M--Walking back to desk from bathroom

-- Empty desk

-- Table

* -- Already counted; do not code

1.165

G. Allocated Time Log (55-60 minutes)

Rationale. Participants need to know how allocated time relates to student engaged time and why information on allocated time is collected. They need to be able to complete records of the time allocated for reading/language arts and math.

Materials	Strategy
1H21--Time Glossary (a-b) ★BT2--Blank Allocated Time Log	Review the definition of allocated time and its relationship to student engaged time. Explain why information on allocated time is collected. Give information about the Allocated Time Log, explaining its format.
1H38--Sue Lee's (a-b) Classroom --Allocated Time Log (1) 1T39--Answer Key for 1H38	Explain how Sue Lee completed the log for reading/language arts. Note that all students have the same assignments. See Note G.2 for a detailed description of this activity. Ask participants to complete the log for math for Sue's class. Check answers and discuss any difficulties.
★1H38 or 1H40	
1H40--Lisa Hadley's (a-b) Classroom --Allocated Time Log (1) 1T41--Answer Key for 1H40	Explain how Lisa Hadley completed the log for reading/language arts. Note that in her class different groups of students may have different assignments during a time period. See Note G.3 for a detailed description of this activity. Have participants complete the log for math for Lisa's classroom. Check and discuss answers.
★√1H42--Allocated Time (a-b) Log --Allocated Time Logs (4) 1T43--Key for √1H42 (a-d)	Have participants complete Allocated Time Logs for one of the classrooms described in √1H42 independently and check their answers. In the classroom described on √1H42a, all students have assignments in the same subject in each time period; in the classroom described on √1H42b, different parts of the class have assignments in different subjects during some time periods. If an answer is incorrect, try to give the person a hint that will help him/her to correct the error

Materials	Strategy
	(e.g., you skipped a column, how about the top, look at this column again). Discuss any difficulties. Have participants complete Allocated Time Logs for the classroom described in Appendix G (√1H42c) if necessary (i.e., if procedures used were incorrect or if there were numerous arithmetic errors). Check the answers. If anyone is still having difficulty, work with that person individually at a later time.

Alternative Strategies

1. Complete only one example (1H38 or 1H40) in the session. If teachers' schedules are simple (e.g., same assignments for all students during each time period), use 1H38; otherwise, use 1H40.
2. Complete only one example (1H38 or 1H40) in the session; have participants complete the second example independently between meetings.
3. Have participants complete the checkpoint (√1H42) independently between meetings. Check and discuss answers in the next session.

★1. Collecting information on allocated time (5 minutes)

a. Allocated time as a component of student engaged time (1H21a)

(1) Definition--amount of time teachers spend on instruction in a content area

(2) Student engaged time = allocated time × engagement rate

(3) Increasing (or decreasing) allocated time increases (or decreases) student engaged time (other things remaining equal)

b. Ways to collect needed information

(1) Log is most convenient form

(2) Teacher fills out for all instruction in the subject area(s) observed only on days observed (See Note D.1.b.)

(a) Completed before, during, or after class

(b) Older student may be able to complete

(3) Need for log--actual allocated time not always same as intended

(4) Benefits of log

(a) Teachers become more aware of lost allocated time as they keep records

(b) Analogy to behavior modification of smoking--keeping a record of the number of cigarettes smoked results in fewer smoked

†c. Allocated Time Log (BT2)

(1) Information at top

(a) Subject area--use different form for each subject area (e.g., reading/language arts on one and math on another) and/or for each class (if more than one group of students is taught)

(b) Number of students present

(2) Column headings

(3) Activities--change when students in classroom are reassigned to different tasks (e.g., reading groups, spelling, math drill)

†2. Example of Sue Lee's classroom (1H38, 1T39) (15 minutes)

a. Simple schedule--whole class assigned to same subject area(s) during each time period

★2 or 3

b. Log for reading/language arts

(1) Entries during day

(a) Description of activity and beginning time (column A)

(b) Ending time (column B) when assignments change

(i) Activity #2--ending time not same for all students since working independently on assignments in two different subject areas; Sue records "varies"

(c) Time in minutes (column C) = ending time - beginning time (B - A)

(i) Activity #2--Sue estimates time needed by an "average" student to complete the reading assignment

(2) Calculations at end of day--add last column to get total allocated time for reading/language arts

c. Log for math

†3. Example of Lisa Hadley's classroom (1H40, 1T41) (20 minutes)

a. Reading/language arts

(1) Entries during day

(a) Description of activity and beginning time (column A)

★2 or 3 (b) Ending time (column B) when assignments change

(i) Activity #4--ending time not same for all students since working on several assignments in different subject areas; Lisa records "varies"

(c) Time in minutes (column C) = ending time (column B) - beginning time (column A)

(i) Activity #2

- About half the students (12) are assigned to reading, so Lisa multiples ½ x 44 minutes to get 22 minutes
- Students need not be in classroom--if these 12 were in Title I class, same numbers would be recorded

(ii) Activity #4--Lisa estimates time needed by an "average" student to complete the reading assignment

(2) Calculations at end of day

(a) Total time for reading/language arts--add last column

b. Math

4. Demonstration of mastery (√1H42, 1T43) (15-20 minutes)

★a. Directions for checkpoint

b. Directions for Allocated Time Log

★4.c or 4.d c. Example of Ann Riley's classroom--reading/language arts and math (whole class in same subject)

d. Example of Tony Casini's classroom--reading/language arts and math (different students assigned to different subjects)

Materials

In addition to the materials included in this section, the following are needed:

1H21 (a-b)	Time Glossary	(Topic C)
BT2	Blank Allocated Time Log	(Appendix B)
	Allocated Time Logs (2-6)	(Forms)

Included in Appendix G are the following supplementary materials:

√GH42c	Erica Swenson's Classroom (different groups assigned to different subjects)
GT43 (e-f)	Key for √GH42c

EXAMPLE OF SUE LEE'S CLASSROOM

Sue Lee is a fourth grade teacher at the fictional New Delpen Elementary School in Eastern School District, Atlantic State. The following table presents a description of activities in Sue's classroom on October 8. Twenty-three children were present on this day. Sue's code numbers are:
State--03 District--47 School--08 Teacher--YI99

Time	Activity
8:30 - 8:45	Opening exercises
8:45 - 10:39	Reading groups
10:39 - 11:14	Reading and art seatwork Reading--about 20 minutes Art--about 15 minutes
11:14 - 11:43	Spelling
11:43 - 12:46	Lunch and recess
12:46 - 1:31	Math lesson
1:31 - 2:45	Math and science seatwork Math--about 20 minutes Science--about 54 minutes
2:45 - 2:59	Music

Sue has completed an Allocated Time Log for reading/language arts as shown on 1H38b. Complete a second log for Sue's classroom for math.

Reading/Language Arts--163 minutes
Math--65 minutes

STATE Atlantic
DISTRICT Eastern
SCHOOL New Delpen
TEACHER Lee

ALLOCATED TIME LOG

STATE # 03 SCHOOL # 08 DATE 10/8 SUBJECT Reading/Lang.
DISTRICT # 47 TEACHER # YI99 GRADE 4 NO. OF STUDENTS PRESENT 23

	ACTIVITY	BEGINNING TIME (A)	ENDING TIME (B)	TIME IN MINUTES (C)
1	Reading groups	8:45	10:39	114
2	Reading seatwork	10:39	Varies	20
3	Spelling	11:14	11:43	29
4				
5				
6				
			TOTAL	163

7/17/80

1.172

187

188

1H38b

STATE Atlantic
DISTRICT Eastern
SCHOOL New Delpen
TEACHER Lee

ALLOCATED TIME LOG

STATE # 03 SCHOOL # 08 DATE 10/8 SUBJECT Math
DISTRICT #47 TEACHER #YI99 GRADE 4 NO. OF STUDENTS PRESENT 23

	ACTIVITY	BEGINNING TIME (A)	ENDING TIME (B)	TIME IN MINUTES (C)
1	Lesson	12:46	1:31	45
2	Seatwork	1:31	varies	20
3				
4				
5				
6				
			TOTAL	65

7/17/80

Key for 1H38

1T39

1.173

EXAMPLE OF LISA HADLEY'S CLASSROOM

Lisa Hadley teaches first grade at the fictional New Delpen Elementary School in Eastern School District, Atlantic State. The following table presents a description of activities in Lisa's classroom on Wednesday, October 10. There were 25 students present on this day. Lisa's code numbers are:

State--03 District--47 School--08 Teacher--WKI2

Time	Activity	Number of Students
8:30 - 8:46	Opening exercises	25
8:46 - 10:01	Reading groups and seatwork	25
10:01 - 10:30	Recess	
10:30 - 11:14	Reading groups and seatwork	12
	Art projects	13
11:14 - 11:44	Spelling	25
11:44 - 12:45	Lunch and recess	
12:45 - 1:45	Math lesson and seatwork	17
	Art projects	8
1:45 - 2:25	Language arts and math seatwork Language--about 15 mins. Math--about 25 mins.	25
2:25 - 3:00	Music	25

Lisa has completed an Allocated Time Log for reading/language arts (1H40b). Complete a second log for math for Lisa's class.

STATE Atlantic
DISTRICT Eastern
SCHOOL New Delpen
TEACHER Hadley

ALLOCATED TIME LOG

STATE # 03 SCHOOL # 08 DATE 10/10
DISTRICT # 47 TEACHER # WKI2 GRADE 1

SUBJECT Reading/Lang.
NO. OF STUDENTS PRESENT 25

	ACTIVITY	BEGINNING TIME (A)	ENDING TIME (B)	TIME IN MINUTES (C)
1	Reading groups and seatwork	8:46	10:01	75
2	Reading groups and seatwork	10:30	11:14	22*
3	Spelling	11:14	11:44	30
4	Language arts seatwork	1:45	Varies	15
5				
6				
			TOTAL	142

*Adjusted since only half of class assigned

7/17/80

1.175

192

193

1H40b

STATE Atlantic
DISTRICT Eastern
SCHOOL New Delpen
TEACHER Hadley

ALLOCATED TIME LOG

STATE # 03 SCHOOL # 08 DATE 10/10
DISTRICT #47 TEACHER # WKI2 GRADE 1

SUBJECT Math
NO. OF STUDENTS PRESENT 25

	ACTIVITY	BEGINNING TIME (A)	ENDING TIME (B)	TIME IN MINUTES (C)
1	Lesson and seatwork	12:45	1:45	40*
2	Seatwork	1:45	Varies	25
3				
4				
5				
6				
			TOTAL	65

*Adjusted since only two-thirds of class assigned

7/17/80

1.176

1T41

ALLOCATED TIME LOG

The following pages present descriptions of activities in two teachers' classrooms on different days. Complete an Allocated Time Log for reading/language arts and for math for at least one classroom and then check your answers. If you have difficulty or would like additional practice, complete the Allocated Time Log for reading/language arts and for math for the classroom described in Appendix G.

Ann Riley teaches sixth grade at the fictional New Delpen Elementary School, Eastern School District, Atlantic State. The following table describes activities in her classroom on September 28. Twenty students were present on this day.

Time	Activity
8:45 - 9:00	Opening exercises
9:00 - 10:15	Reading groups and seatwork
10:15 - 11:15	Reading seatwork and science activity Reading--about 40 minutes Science--about 20 minutes
11:15 - 11:30	Math drill
11:30 - 12:30	Lunch and recess
12:30 - 1:15	Math lesson and seatwork
1:15 - 1:45	Gym
1:45 - 2:05	Spelling
2:05 - 2:20	Sustained silent reading
2:20 - 3:00	Social studies

Tony Casini teaches third grade at the fictional New Delpen Elementary School, Eastern School District, Atlantic State. The following table describes activities in Tony's classroom on Thursday, March 15. Twenty-eight students were present on this day.

Time	Activity	Number of Students
8:30 - 8:45	Opening exercises	28
8:45 - 10:00	Reading groups and seatwork	28
10:00 - 10:30	Recess	
10:30 - 11:14	Reading seatwork	14
	Science	14
11:14 - 11:44	Spelling	28
11:44 - 12:45	Lunch and recess	
12:45 - 1:30	Math lesson	28
1:30 - 2:15	Gym	28
2:15 - 3:00	Language arts and math seatwork Language--25 minutes Math--20 minutes	28

Complete an Allocated Time Log (front and back) for reading/language arts and for math for Tony's class.

STATE Atlantic
DISTRICT Eastern
SCHOOL New Delpen
TEACHER Riley

ALLOCATED TIME LOG

STATE # ____ SCHOOL # ____ DATE 9/28
DISTRICT # ____ TEACHER # ____ GRADE 6

SUBJECT Reading/Lang.
NO. OF STUDENTS PRESENT 20

	ACTIVITY	BEGINNING TIME (A)	ENDING TIME (B)	TIME IN MINUTES (C)
1	Reading groups & seatwork	9:00	10:15	75
2	Reading seatwork	10:15	varies	40
3	Spelling	1:45	2:05	20
4	Sustained silent reading	2:05	2:20	15
5				
6				
			TOTAL	150

7/17/80

Key for √1H42a

1T43a

1.179

STATE Atlantic
DISTRICT Eastern
SCHOOL New Delpen
TEACHER Riley

ALLOCATED TIME LOG

STATE # ____ SCHOOL # ____ DATE 9/28
DISTRICT # ____ TEACHER # ____ GRADE 6

SUBJECT Math
NO. OF STUDENTS PRESENT 20

	ACTIVITY	BEGINNING TIME	ENDING TIME	TIME IN MINUTES
1	Drill	11:15	11:30	15
2	Lesson & seatwork	12:30	1:15	45
3				
4				
5				
6				
			TOTAL	60

7/17/80

Key for 1H42a

1T43b

1.180

STATE Atlantic
DISTRICT Eastern
SCHOOL New Delpen
TEACHER Casini

ALLOCATED TIME LOG

STATE # ____ SCHOOL # ____ DATE 3/15 SUBJECT Reading/Lang
DISTRICT # ____ TEACHER # ____ GRADE 3 NO. OF STUDENTS PRESENT 28

	ACTIVITY	BEGINNING TIME	ENDING TIME	TIME IN MINUTES
1	Reading groups & seatwork	8:45	10:00	75
2	Reading seatwork	10:30	11:14	22*
3	Spelling	11:14	11:44	30
4	Language arts seatwork	2:15	Varies	25
5				
6				
			TOTAL	152

*Adjusted since only half of class assigned

7/17/80

Key for 1H42b

1T43c

1.181

STATE Atlantic
DISTRICT Eastern
SCHOOL New Delpen
TEACHER Casini

ALLOCATED TIME LOG

STATE # ____ SCHOOL # ____ DATE 3/15 SUBJECT Math
DISTRICT # ____ TEACHER # ____ GRADE 3 NO. OF STUDENTS PRESENT 28

	ACTIVITY	BEGINNING TIME	ENDING TIME	TIME IN MINUTES
1	Lesson	12:45	1:30	45
2	Seatwork	2:15	Varies	20
3				
4				
5				
6				
			TOTAL	65

7/17/80

Key for IH42b

IT43d

1.182

203

204

Notes

The following notes are included in this section:

G.1.c. Allocated Time Log

G.2. Example of Sue Lee's Classroom

G.3. Example of Lisa Hadley's Classroom

7/25/80

G.1.c. Allocated Time Log

The Allocated Time Log is a daily log that may be used by teachers to record allocated time. In the upper left-hand corner, the teacher is identified. In the upper right-hand corner, the grade, date, subject, and number of students present are recorded. (Note that if a teacher wishes to share his/her data without revealing its source, the information can be coded along the top center of the form; the left-hand corner can then be cut away.)

A different form is used for each subject. Reading and language arts activities should be recorded on the same form unless the number of students present differs for these subjects (e.g., if a teacher has 25 third-graders for reading and 18 third- and fourth-graders for language arts, he/she would use one log for reading and another for language arts.) Similarly, a teacher who has different groups of students for the same subject should use one form for each class.

Whenever a group of students is assigned to reading/language arts or math, the teacher describes the activity (e.g., reading groups, spelling, math drill) and records the beginning time (column A). The teacher records the ending time (column B) when the activity is completed or assignments change. He/she also finds the time in minutes (column C) for that activity for each student by subtracting the beginning time from the ending time (column B - column A).

If students are working on assignments in more than one subject area during an activity (e.g., "finish your language seatwork and then begin this science assignment"), the teacher records "varies" as the ending time in column B and estimates the time needed by an average student to complete the activity to find the time in minutes (column C).

If different groups of students are assigned to different subjects, then the teacher adjusts the time in minutes by multiplying by the fraction of the class in the appropriate subject area. For example, if two-thirds of the class is doing reading seatwork and one-third is doing a science activity from 10:15 to 11:15, then the time in minutes for reading is 2/3 x 60 minutes = 40 minutes.

At the end of the day, the teacher adds the allocated times for each activity to get the total allocated time for the subject area.

In addition to using the Allocated Time Log to record the average allocated time for a class, some teachers may wish to record allocated time for a certain group or groups of students. In such a case, the teacher simply uses a different Allocated Time Log for each group.

G.2. Example of Sue Lee's Classroom (whole class assignments)

This note discusses step-by-step one of the examples that is used in the session (1H38). Directions are in italics and are meant to be completed as you read through this note; these same directions may be appropriate to use as you present the example.

The example on 1H38 concerns Sue Lee's fourth grade classroom activities on October 8. Sue's classroom schedule is relatively simple; all students are working in the same subject areas during each time period. Sue first completes the information at the top of the log at the beginning of the school day.

	ALLOCATED TIME LOG	
STATE Atlantic DISTRICT Eastern SCHOOL New Delpen TEACHER Lee	STATE # 03 SCHOOL # 08 DATE 10/8 DISTRICT # 47 TEACHER # 7199 GRADE 4	SUBJECT Reading/Lang. NO. OF STUDENTS PRESENT 23

The whole class is involved in reading and language arts activities from 8:45 until 10:39, when students are given reading and art assignments. For Activity #1, Sue records a description of the activity and the beginning time. These entries are recorded below.

	ACTIVITY	(A) BEGINNING TIME	(B) ENDING TIME	(C) TIME IN MINUTES
1	Reading groups	8:45		
2				
3				

When assignments change at 10:39, Sue records the ending time for the first activity and finds the time in minutes by computing ending time minus beginning time. Then she describes the second activity and records the beginning time. These entries are circled on the next page.

	ACTIVITY	(A) BEGINNING TIME	(B) ENDING TIME	(C) TIME IN MINUTES
1	Reading groups	8:45	(10:39)	(114)
2	(Reading seatwork)	(10:39)		
3				

Since students may finish the reading assignment at different times, Sue records "varies" for the ending time for the second activity. To find the time in minutes, she estimates the time needed by an average student to complete the reading assignment (20 minutes). Sue then describes the third activity and records its beginning time. These entries are circled below. She records the end of spelling class as the end of the third activity and finds the time in minutes. These entries are enclosed in triangles below.

	ACTIVITY	(A) BEGINNING TIME	(B) ENDING TIME	(C) TIME IN MINUTES
1	Reading groups	8:45	10:39	114
2	Reading seatwork	10:39	(varies)	(20)
3	(Spelling)	(11:14)	▽11:43	▽29

At the end of the day, Sue adds the time in minutes column to find a total allocated time for reading/language arts of 163 minutes.

Sue completes another log for math. Fill out the information at the top of the log for Sue.

The whole class is involved in a math lesson from 12:46 to 1:31. Describe the activity and record the beginning time. Then record the ending time and find the time in minutes.

The class has multiple assignments in math and science from 1:31 to 2:45. Describe the activity and complete the beginning time, ending time, and time in minutes columns.

Find the total allocated time for math by adding the last column. Check your answers with those on the answer key (1T39).

G.3. Example of Lisa Hadley's Classroom (different groups assigned to different subjects)

This note discusses in detail one of the examples used in the session (1H40). Directions are in italics and are meant to be completed as you read; these same directions may be appropriate to use as you present the example.

The example on 1H40 concerns Lisa Hadley's first grade classroom activities on October 10. Lisa's schedule is rather complex; different groups of students are assigned to different subject areas during a single activity period. Lisa first completes the information at the top of the log.

	ALLOCATED TIME LOG	
STATE Atlantic DISTRICT Eastern SCHOOL New Delpen TEACHER Hadley	STATE # 03 SCHOOL # 08 DATE 10/10 DISTRICT #47 TEACHER # WK12 GRADE 1	SUBJECT Reading/Lang NO. OF STUDENTS PRESENT 25

The first reading/language arts activity begins at 8:46 when the whole class begins reading groups and seatwork. Lisa describes this activity and records the beginning time. These entries are recorded below.

	ACTIVITY	(A) BEGINNING TIME	(B) ENDING TIME	(C) TIME IN MINUTES
1	Reading groups and seatwork	8:46		
2				
3				
4				

When the first activity ends, Lisa records the ending time and finds the time in minutes. These entries are circled below. After recess, when the second reading/language arts activity begins, Lisa describes the activity and records the beginning time. These entries are circled below.

	ACTIVITY	(A) BEGINNING TIME	(B) ENDING TIME	(C) TIME IN MINUTES
1	Reading groups and seatwork	8:46	10:01	75
2	Reading groups and seatwork	10:30		
3				

At the end of this activity, Lisa records the ending time. Since not all of the class was assigned to reading during this period, Lisa must adjust the time in minutes. She first subtracts the beginning time from the ending time (11:14 - 10:30) to get 44 minutes. Then, since about half of the students were assigned to reading, she multiplies ½ x 44 minutes = 22 minutes and records this in the last column. When spelling begins, Lisa describes the activity and records the beginning time. These entries are circled below. At the end of the activity, Lisa records the ending time and the time in minutes. These entries are enclosed in triangles below.

	ACTIVITY	(A) BEGINNING TIME	(B) ENDING TIME	(C) TIME IN MINUTES
1	Reading groups and seatwork	8:46	10:01	75
2	Reading groups and seatwork	10:30	11:14	22
3	Spelling	11:14	11:44	30
4				

There is only one reading/language arts activity in the afternoon. This activity involves multiple assignments in language arts and math. Lisa describes the activity and records the beginning time. These entries are circled below. Since there are multiple assignments, however, the ending time is different for different students, so Lisa records "varies" as shown below. To find the time in minutes, she estimates the time needed by an average student to complete the language assignment (15 minutes). These entries are enclosed in triangles below.

	ACTIVITY	(A) BEGINNING TIME	(B) ENDING TIME	(C) TIME IN MINUTES
1	Reading groups and seatwork	8:46	10:01	75
2	Reading groups and seatwork	10:30	11:14	22
3	Spelling	11:14	11:44	30
4	Language arts seatwork	1:45	varies	15

Lisa finds the total allocated time for reading/language arts by adding the time in minutes for each activity. *Add the last column and check to see if it matches Lisa's answer of 142 minutes.*

Complete another Allocated Time Log for Lisa's classroom for math and check your answers with those on the answer key (1T41).

★ H. Scheduling (40 minutes)

Rationale: Teachers need a plan for data collection.

Materials	Strategy
	Review the rationale for systematic and repetitive classroom observations.
1H44--Alternative Initial Observation Procedures 1H45--Observation Schedule (a-b) 1H46--Pre-Observation Form (a-b) 1T47--Forms Used in Information Collection	Describe the alternative strategies for data collection and the advantages and disadvantages of each strategy. Select a strategy and have each teacher develop an observation schedule for his/her classroom. Then describe the rationale for the Pre-Observation Form and explain how it is completed.

Alternative Strategies

1. Make a videotape of the classroom during the scheduled observation time and have the teacher complete the Engagement Rate Form for his/her own classroom. The teacher and another observer should code the first tape to check for teacher bias (See Note D.1.b.).
2. In order to account for individual differences in coding, you may want to have different observers in each classroom on different days.

1. Rationale for systematic and repetitive scheduling of observation (5 minutes)
   a. Accurate picture of variation in classroom throughout year
   b. Repetitive observations--means of evaluating strategy for increasing or maintaining levels of student engaged time
2. Alternative initial observation strategies (15 minutes)
   a. Rationale
      (1) Different situations require different strategies for data collection--e.g., teachers with more than one class in a subject area may wish to observe only one or may wish to keep separate records for two or more
      (2) Each strategy has advantages and disadvantages
   b. Descriptions (1H44)
      (1) 1-2 days of observation for reading, language arts, and math
         (a) Observe 1/3 of the allocated time for each subject at the beginning, middle, and end of period on 1-2 days

(2) 1-2 days of observation for reading and math and 1 day for language arts

(a) Observe 1/3 of allocated time for reading and math at beginning, middle, and end of period on 1-2 days

(b) Observe 1/3 of allocated time for language arts during the middle of the period on 1 day

(3) Shorter observations on 1-2 days for reading and 1 day for language arts

(a) Observe 15 minutes of reading and math at the beginning, middle, and end of the allocated time on 1-2 days

(b) Observe 15 minutes of language arts at middle of allocated time on 1 day

(4) One day of observation for each subject

(a) Observe entire allocated time on one day for each subject

c. Advantages and disadvantages of each strategy

(1) First strategy--1-2 days observing reading, language arts, and math

(a) Advantages

(i) Better sampling of language arts activities

(ii) 1/3-2/3 of period is observed in each subject over 1-2 days

(b) Disadvantages

(i) Time and scheduling requirements

(2) Second strategy--1-2 days observing reading and math, and 1 day observing language arts

(a) Advantages

(i) 1/3-2/3 of period is observed for reading and math over 1-2 days

(ii) Fewer observations needed than first strategy

(b) Disadvantages

(i) Less language arts time and fewer types of language arts activities are observed

(3) Third strategy--shorter observations on 1-2 days for reading and math and 1 day for language arts

(a) Advantages

(i) Less time is required for each observation but one or two days are still sampled

(b) Disadvantages

(i) Whole period is not observed

(ii) Less language arts time and fewer types of language arts activities are observed

(4) Fourth strategy--1 day of observation for each subject

(a) Advantages

(i) Easier to schedule

(ii) Easier to see classroom's patterns when entire period is observed for one day

(iii) Better samplings of language arts

(b) Disadvantages

(i) Limited to one day, which may not be typical

(ii) Variation between days and types of activities will not show

d. Selection of strategy

3. Scheduling observations (1H45) (20 minutes)

a. Dates

(1) Typical days

(a) Not first week of school, shortened days, first day before or after a long vacation

(b) Representative of variations in activities (e.g., amount of time spent on reading/language arts or math differs or specific aspects of these subjects are taught on different days)

(2) Observation days do not need to be consecutive

(3) 1-2 days per subject area depending on selected strategy

b. Times

(1) Part of period

(2) Duration of observation

(3) Frequency of observation

c. Observer

(1) Must have demonstrated mastery

(2) Another classroom teacher, reading or math specialist or coordinator, principal, district curriculum coordinator, substitute, or student teacher

(3) Different people can make observations for a subject on different days

†(4) Teacher's ratings of own students' engagement correlates with student aptitude, not with observer's ratings of engagement (See Note D.1.b.)

d. Pre-Observation Form (1H46)

(1) Rationale - more accurate information is collected if observer understands the schedule and planned activities

(2) Teacher completes prior to observation day and discusses it with observer, if possible

(3) Description

(a) Number of students assigned to each activity on the front

(b) Description of assigned activities on back

(c) Attach assigned worksheets, if possible

4. Review of forms (1T47)

Materials

I.

Subject	# Days of Observations	Length of Observation	Part of Period	Observation Intervals
Reading	1-2	1/3 of allocated time	beginning middle end	1-2 minutes
Language Arts	1-2	1/3 of allocated time	beginning middle end	
Math	1-2	1/3 of allocated time	beginning middle end	1-2 minutes

II.

Subject	# Days of Observation	Length of Observation	Part of Period	Observation Intervals
Reading	1-2	1/3 of allocated time	beginning middle end	1-2 minutes
Language Arts	1	1/3 of allocated time	middle	
Math	1-2	1/3 of allocated time	beginning middle end	1-2 minutes

III.

Subject	# Days of Observation	Length of Observation	Part of Period	Observation Intervals
Reading	1-2	15 minutes	beginning middle end	1 minute
Language Arts	1	15 minutes	middle	
Math	1-2	15 minutes	beginning middle end	1 minute

IV.

Subject	# Days of Observation	Length of Observation	Part of Period	Observation Intervals
Reading	1	entire allocated time	entire allocated time	1-3 minutes
Language Arts	1	entire allocated time	entire allocated time	
Math	1	entire allocated time	entire allocated time	1-3 minutes

CLASSROOM OBSERVATION SCHEDULE*

Reading

Date	Time	Part of Period	Observer

Language Arts (e.g., spelling, writing, grammar)

Subject	Date	Time	Observer

Math

Date	Time	Part of Period	Observer

*To be completed by each teacher for his/her classroom to provide a record of when his/her class will be observed.

OBSERVER'S SCHEDULE*

Classroom To Be Observed (Teacher)	Subject To Be Observed	Date	Arrival Time

*To be completed by each observer to provide a record of where and when he/she is to observe.

7/24/80

Pre-Observation Form

1H46a

Teacher _____ Subject _____

Observer _____ Observation Date _____

Time Interval _____ Circle Part of Period: beginning / middle / end

No. of Students Present _____

Record number of students assigned to each category during the observation period.

Times	Reading/ Language Arts	Math	Other Subjects Specify:	Pull-Out	Out of Room Specify:

1.198

Pre-Observation Form (cont'd)

Briefly describe assignments for each subject and free-time activities (attach worksheets if possible).

Reading

Group 1

Group 2

Group 3

Language Arts

Math

FORMS USED IN INFORMATION COLLECTION

Form	Completed By	Time of Completion
Pre-Observation Form	Classroom Teacher	Prior to observation (only for observation days)
Allocated Time Log	Classroom Teacher	On observation days for <u>all</u> reading, language arts, and math instruction
Engagement Rate Form	Observer	On observation days during reading, language arts, and math instruction

7/24/80

1.200

7/24/80

FORMS

The following forms need to be reproduced in multiple copies for each participant. You may wish to color code these forms in order to help distinguish them. Each participant will need:

- Pre-Observation Form
  - 3-9 forms needed for initial observation cycle
  - 1-3 forms needed for subsequent observations

- Allocated Time Log
  - 4-6 forms needed for training activities in Topic G
  - 3-6 forms needed for initial observation cycle
  - 1-2 forms needed for subsequent observations

- Engagement Rate Form
  - 1 form needed for training activities in Topic D
  - 2-4 forms needed for training activities in Topic E (observer training)
  - 1-3 forms needed for training activities in Topic F (demonstration of mastery)
  - 6-9 forms needed for initial observation cycle
  - 2-6 forms needed for subsequent cycles

Masters for these forms are included in the following pages. Also included is an Alternate Engagement Rate Form which provides space for recording the time of observation in two places: with reading/language arts or with math.

7/24/80

Pre-Observation Form

Teacher _____ Subject _____

Observer _____ Observation Date _____

Time Interval _____ Circle Part of Period: beginning / middle / end

No. of Students Present _____

Record number of students assigned to each category during the observation period.

Times	Reading/ Language Arts	Math	Other Subjects Specify:	Pull-Out	Out of Room Specify:

Pre-Observation Form (cont'd)

Briefly describe assignments for each subject and free-time activities (attach worksheets if possible).

Reading

Group 1

Group 2

Group 3

Language Arts

Math

Other

1,203

7/16/80

ALLOCATED TIME LOG

State_____
District_____
School_____
Teacher_____

Subject_____

State #_____ School #____ Date_____ No. of Students
District #____ Teacher #____ Grade ____ Present_____

	Activity	Beginning Time (A)	Ending Time (B)	Time in Minutes (B) - (A) (C)
1				
2				
3				
4				
5				
6				
			TOTAL	

DIRECTIONS

1. Fill out the information at the top of the page, including the date, subject (reading/language arts or math), and number of students present.
2. Whenever students are assigned to the subject area, record a description of the activity (e.g., reading groups, spelling, math drill) and the beginning time (A).
3. Record the ending time when assignments change (e.g., the activity is completed). Find the time spent on the activity in minutes (C) by subtracting beginning time from ending time (B - A).
   - If students are working on more than one subject area during an activity (e.g., math or reading seatwork), put "varies" in as the ending time (B) and for time in minutes (C), put an estimate of the time an average student spends completing the activity in the subject area.
   - If part of the class is working in one subject area while the rest of the class works in another subject area, adjust the time in minutes by multiplying by the approximate fraction of the class in the appropriate subject area. For example, if about half the class is working on reading and about half on science during a 60-minute activity, the time in minutes is $1/2 \times 60 = 30$ minutes.
4. Add the last column to get the total allocated time for the subject area.

STATE _____
DISTRICT _____
SCHOOL _____
TEACHER _____
CODER _____

ENGAGEMENT RATE FORM

State # _____ School # _____ Date _____ Grade _____

District # ____ Teacher # _____ Coder # ____ # Students Present ____

Part of Class Observed
Beg. ____
Mid. ____
End ____

	Time	1	2	3	4	5	6	7	8	9
READING/LANGUAGE ARTS	Assigned									
	Management/ Transition									
	Socializing									
	Discipline									
	Unoccupied/ Observing									
	Out of Room									
	Total Unengaged									
	Engaged[1]									
MATHEMATICS	Assigned									
	Management/ Transition									
	Socializing									
	Discipline									
	Unoccupied/ Observing									
	Out of Room									
	Total Unengaged									
	Engaged[1]									
	Other Assigned									
	Pull-Out Assigned									
	# Students Present[2]									

Notes: [1]Engaged = Assigned - Total Unengaged [2]To be used only if number of students present changes during period of observation

DIRECTIONS

1. Enter the classroom about 5 minutes before observations will begin. Fill out the information in the upper left corner of the form; record the date, grade, number of students present (attendance), and part of class observed (check one: beginning, middle, or end) at upper right.

2. Record observation data (number of students assigned, not engaged, number of students engaged).

Observer's comments:

	Time	10	11	12	13	14	15	Total	Engagement Rate
READING/LANGUAGE ARTS	Assigned								Engaged / Assigned
	Management/ Transition								
	Socializing								
	Discipline								
	Unoccupied/ Observing								
	Out of Room								
	Total Unengaged								
	Engaged[1]								
MATHEMATICS	Assigned								Engaged / Assigned
	Management/ Transition								
	Socializing								
	Discipline								
	Unoccupied/ Observing								
	Out of Room								
	Total Unengaged								
	Engaged[1]								
	Other Assigned								
	Pull Out Assigned								
	# Students Present								

3. Add across each row to find the total. If more than one Engagement Rate Form was used for a subject area on that day, add the totals for all forms and record these numbers on the last form used.

4. Calculate engagement rates for the day by dividing the Total Number of Students Engaged by the Total Number of Students Assigned for each subject area.

Engagement Rate for Reading/Language Arts = Total Students Engaged in Reading/Language Arts / Total Students Assigned to Reading/Language Arts = _____

Engagement Rate for Mathematics = Total Students Engaged in Math / Total Students Assigned to Math = _____

7/24/80

STATE _____
DISTRICT _____
SCHOOL _____
TEACHER _____
CODER _____

ALTERNATE ENGAGEMENT RATE FORM

State # _____ School # _____ Date _____ Grade _____

District # ____ Teacher # _____ Coder # ____ # Students Present ____

Part of Class Observed
Beg. ____
Mid. ____
End ____

	Time	1	2	3	4	5	6	7	8	9
READING/LANGUAGE ARTS	Assigned									
	Management/ Transition									
	Socializing									
	Discipline									
	Unoccupied/ Observing									
	Out of Room									
	Total Unengaged									
	Engaged[1]									
MATHEMATICS	Time									
	Assigned									
	Management/ Transition									
	Socializing									
	Discipline									
	Unoccupied/ Observing									
	Out of Room									
	Total Unengaged									
	Engaged[1]									
	Other Assigned									
	Pull-Out Assigned									
	# Students Present[2]									

Notes: [1]Engaged = Assigned - Total Unengaged [2]To be used only if number of students present changes during period of observation

DIRECTIONS:

1. Enter the classroom about 5 minutes before observations will begin. Fill out the information in the upper left corner of the form; record the date, grade, number of students present (attendance), and part of class observed (check one: beginning, middle, or end) at upper right.
2. Record observation data (number of students assigned, not engaged, number of students engaged).

7/24/80

Observer's Comments:

	Time	10	11	12	13	14	15	Total	Engagement
READING/LANGUAGE ARTS	Assigned								Engaged / Assigned
	Management/ Transition								
	Socializing								
	Discipline								
	Unoccupied/ Observing								
	Out of Room								
	Total Unengaged								
	Engaged[1]								
	Time								
MATHEMATICS	Assigned								Engaged / Assigned
	Management/ Transition								
	Socializing								
	Discipline								
	Unoccupied/ Observing								
	Out of Room								
	Total Unengaged								
	Engaged[1]								
	Other Assigned								
	Pull Out Assigned								
	# Students Present								

3. Add across each row to find the total. If more than one Engagement Rate Form was used for a subject area on that day, add the totals for all forms and record these numbers on the last form used.

4. Calculate engagement rates for the day by dividing the Total Number of Students Engaged by the Total Number of Students Assigned for each subject area.

Engagement Rate for Reading/Language Arts = $\frac{\text{Total Students Engaged in Reading/Language Arts}}{\text{Total Students Assigned to Reading/Language Arts}}$ = _____

Engagement Rate for Mathematics = $\frac{\text{Total Students Engaged in Math}}{\text{Total Students Assigned to Math}}$ = _____

APPENDIX A

ALTERNATIVE AGENDAS FOR INFORMATION COLLECTION

Included in this appendix are two alternative ways to organize the information collection session(s). Alternative Agenda A differs from the standard agenda by presenting definitions of terms as they are needed. Alternative Agenda B organizes information collection activities into a series of four 2-3 hour meetings. Alternative Agenda C illustrates one way of breaking up videotape training by interspersing other topics.

Alternative Agenda A

Pre-Observation Meeting(s) (6-9 hours)

- Agenda (Topic A--5 minutes)
- Instructional Improvement Cycle (Topic B--5 minutes)
- Rationale for Focus on Time (Topics C.1 and C.2--5 minutes)
- Engagement Rate Form (Topics C.3.b and D--110-120 minutes)
- Observer Training (Topic E--1-3 hours)
- Demonstration of Mastery (Topic F--1-2 hours)
- Allocated Time Log (Topics C.3.a and G--55-60 minutes)
- Scheduling (Topic H--40 minutes)

Alternative Agenda B

Meeting #1 (about 2½ hours)

- Agenda (Topic A--5 minutes)
- Instructional Improvement Cycle (Topic B--5 minutes)
- Rationale for Focus on Time (Topic C--15-25 minutes)
- Engagement Rate Form (Topic D--100-110 minutes)
- Summary (Activities completed; activities to be done in next meeting--5 minutes)

Meeting #2 (about 1½-3½ hours)

- Review (Activities completed in previous meeting; Topic D.2--15 minutes)
- Observer Training on the Engagement Rate Form (Topics E.1-E.2.c--1-2 hours)
- Summary (Activities completed; activities to be done in next meeting--10 minutes)

Meeting #3 (about 1½-2½ hours)

- Review (Activities already completed; Topic E.2.d--20 minutes)
- Demonstration of Mastery of the Engagement Rate Form (Topic F--1-2 hours)
- Summary (Activities completed; activities to be done in next meeting--10 minutes)

Meeting #4 (about 2 hours)

- Agenda (Activities to be done--5 minutes)
- Allocated Time Log (Topic G--55-60 minutes)
- Scheduling (Topic H--40 minutes)
- Summary (Activities completed so far, collecting information in classrooms, activities for next meeting--10 minutes)

Alternative Agenda C (5½-9 hours)

- Agenda (Topic A--5 minutes)
- Instructional Improvement Cycle (Topic B--3 minutes)
- Rationale for Focus on Time (Topic C--15-25 minutes)
- Engagement Rate Form (Topic D--100-110 minutes)
- Observer Training (Topics E.1.a, E.1.b.(1)-(2)--30-90 minutes)
- Allocated Time Log (Topic G--55-60 minutes)
- Observer Training (Topics E.1.b. (3), E.2--30-90 minutes)
- Scheduling (Topic H--40 minutes)
- Demonstration of Mastery on the Engagement Rate Form (Topic F--60-120 minutes)

APPENDIX B

SUPPLEMENTARY ACTIVITIES FOR TOPIC B-- PHASES OF THE INSTRUCTIONAL IMPROVEMENT CYCLE (30 minutes)

Rationale. Leaders may wish to provide additional details about applying the instructional improvement cycle to student engaged time either as a part of orientation or as a supplement to Topic B. Actually seeing instruments, graphs, etc., may enable participants to more clearly visualize each phase of the process.

Materials	Strategy
1T1--Instructional Improvement Cycle	Name the phases of the instructional improvement cycle. Discuss the reasons for collecting information on the selected aspects of time.
BT2--Blank Allocated Time Log BT3--Completed Allocated Time Log	Provide a rationale for examining allocated time. Show a sample blank log to illustrate how information is collected on this instrument. Do not go into detail about how to complete the log as more detailed descriptions will be provided later. You may also wish to show a completed log.
BT4--Blank Engagement (a-b)Rate Form BV5--Classroom Scan for Engagement Rate Form BT6--Completed (a-b)Engagement Rate Form	Provide a rationale for examining engagement rates. Briefly describe the observation instrument. Then view the videotape, emphasizing that each individual student would be observed. Then show how this span is recorded in the first column of the completed form.
BT7--Completed Time Nomograph	Provide a brief description of the nomograph, emphasizing its purpose as a device for quickly calculating student engaged time.

Materials	Strategy
BT8--Third Grade Reading Graph BT9--Types of Graphs	Provide a brief description of the research base. Show a sample graph which indicates a classroom's engaged time. Emphasize that different graphs indicate different patterns. Explain that based on these comparisons each teacher determines what kind and how much of a change are needed in student engaged time and the aspects of engaged time that need to be modified.
BH10--Selected Program (a-b) Modifications	Describe the activities in selection and preparation and types of possible modifications. Then describe implementation and monitoring along with the iterative nature of the cycle.

Alternative Strategy

Show only the completed instruments, not the blank ones.

1. Phases of instructional improvement cycle (1T1) (3 min.)
   a. Collect information
   b. Compare collected information with research and identify desired changes
   c. Select program modification(s) and prepare implementation plan
   d. Implement and monitor modifications
   e. Repeat cycle again
2. Information Collection (16 mins.)
   a. Purpose
      (1) Collect information from each classroom so each teacher can make own decisions regarding program modifications
      (2) Not standard prescription for all teachers, since teachers and classes differ

b. Aspects of time related to achievement

(1) Student needs an opportunity to learn content

(a) Amount of time provided for a subject (allocated time)

(2) Providing time is not sufficient if student is not working on learning the content

(a) Rate at which students are engaged in learning during allocated time (engagement rate)

c. Instruments

(1) Log (See Topic G)

(a) Log appropriate way for collecting information on allocated time

(b) Brief description of blank log (BT2) (optional)

(i) Record actual beginning and ending times for each activity

(ii) Allocated time (time in minutes) recorded for each activity

(c) Brief description of completed log (BT3)

(i) Reading groups from 8:51 to 10:01--82 minutes

(ii) Reading groups and language seatwork from 10:30 to 10:57--27 minutes

(iii) Spelling from 12:59 to 1:16--17 minutes

(iv) Sustained silent reading from 2:30 to 2:50--20 minutes

(2) Observation Instrument (See Topic D)

(a) Observation appropriate for collecting information on engagement rate

(b) Brief description of blank form (BT4)

(i) Record number of students assigned to a subject and count the number of students unengaged

(ii) Subtract total unengaged from number assigned to determine number engaged

(iii) Usually 15 observations made each day for 1-2 days at beginning, middle, and end of period for each subject

(iv) Length of period determines the frequency of the observations

(v) Engagement rate figured in last column on the second side by dividing engaged by assigned

(c) Classroom situation during which observation might be made (BV5)

(i) Camera scans middle of third grade reading/ language arts class student by student to determine number of unengaged students in each category

(ii) Observer notes unengaged students during first observation

(d) Brief description of completed form (BT6) as it relates to video (BV5)

(i) Identification information at the top of the form

(ii) First column data from video scan - 16 students assigned and 1 student unengaged; so 15 students are engaged

(iii) 14 other observations made in this classroom at one minute intervals immediately afterwards

(iv) Total each unengaged category on back of form to assist with selection of strategies in Phase III

(v) 75% engagement rate determined by dividing total engaged (180) by total assigned (240)

d. Preparing data for comparison with research findings

(1) Description of nomograph (BT7) - device to help you find the number to compare with research findings

(a) Located allocated time (134 minutes) and engagement rate (75%) on scale

(b) Draw line through these points to determine student engaged time (100 minutes)

(2) Definition of student engaged time - amount of time students are actively engaged in a subject area

3. Comparison and Identification (4 mins.)

a. Comparison with research

(1) Research base - Stallings & Kaskowitz Follow Through Evaluation Study (Appendix C)

(2) Select and read appropriate graph (BT8)

(a) Explanation of graph

(i) The relationship between student achievement (vertical axis) and student engaged time (horizontal axis)

(ii) Inverted u (∩) means more student engaged time is better up to a point; then it declines

(b) Student engaged time from nomograph (100 min.) plotted on graph

b. Identification of opportunities for improvement

(1) What kind of changes--increase, decrease, stay the same

(a) Tony Casini wishes to increase his time from 100 minutes

(b) Teachers between 113-172 minutes may remain the same; teachers above 172 minutes may elect to decrease student engaged time

(c) Different teachers may make different changes, as some graphs indicate more is not always better (BT9)

(2) How much change

(a) Tony wishes to increase from 100 minutes up to 125 minutes

(3) Identify aspect of student engaged time

(a) Try to increase allocated time from 134 to 139 minutes

(b) Try to increase engagement rate from 75% to 90%

4. Selection and preparation of strategies (4 mins.)

a. Selection of strategies

(1) Review research strategies and generate additional strategies (BH10)

(2) Select own strategy based on analysis of previously completed data

(a) Tony's strategy for increasing allocated time based on weekly lesson plans - reduce time in art, music, social studies

(b) Tony's strategy for increasing engagement rate selected on basis of completed Engagement Rate Forms

(i) Provide multiple assignments to reduce number of students unoccupied/observing or socializing

(ii) Discipline students privately to reduce number of times class interrupted by discipline

b. Preparation

(1) Implementation planning

(2) Planning for monitoring

5. Implementation and monitoring (3 minutes)

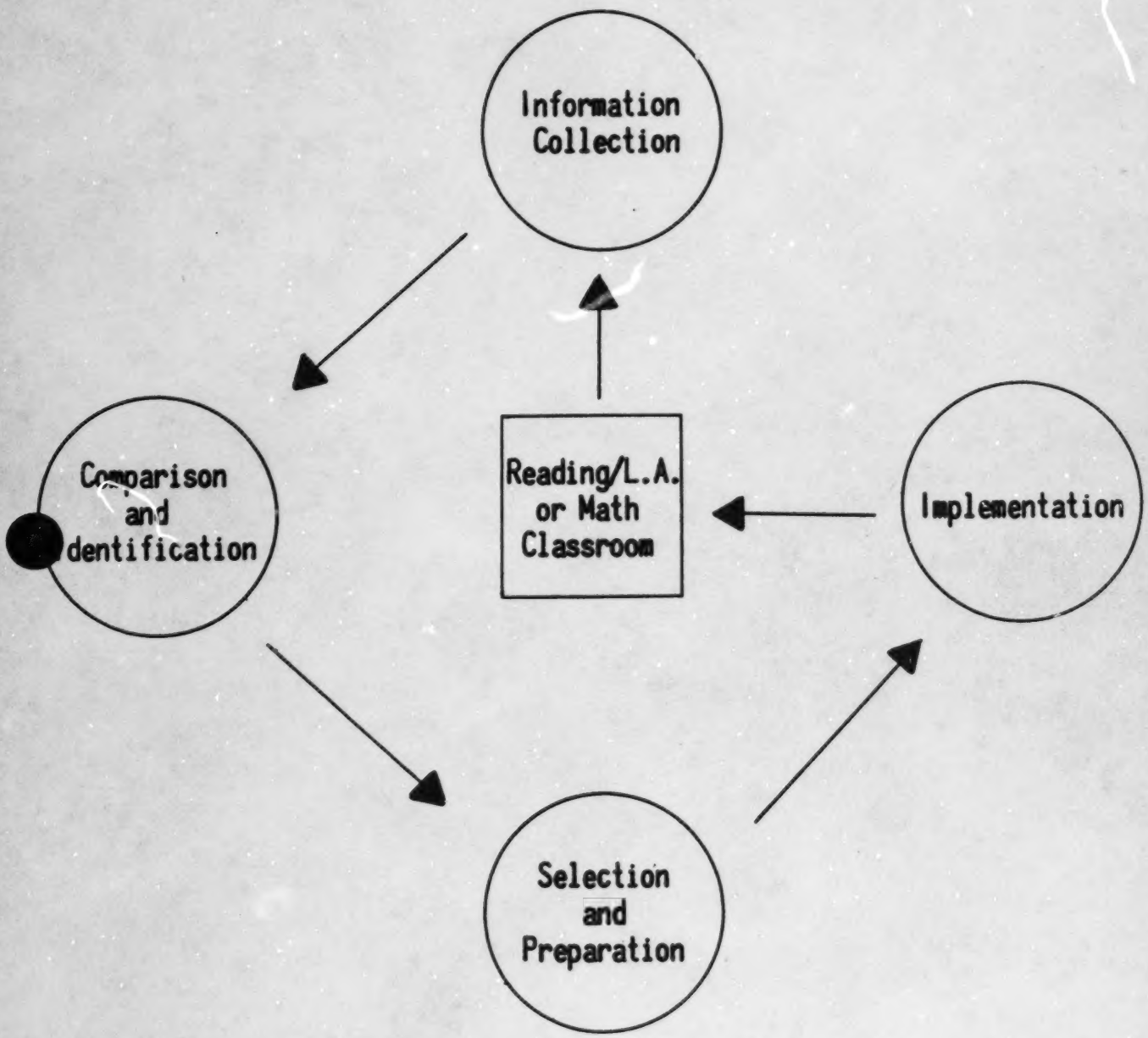
   a. Monitoring implementation if complex strategy is planned

   b. Tony informally monitors implementation of all 3 strategies for several weeks before collecting data again

   c. Repeat cycle throughout the year to see if strategy made expected change in student engaged time

MATERIALS

BASIC SKILLS INSTRUCTIONAL IMPROVEMENT CYCLE



STATE_____
DISTRICT_____
SCHOOL_____
TEACHER_____

ALLOCATED TIME LOG

STATE #_____ SCHOOL #_____ DATE_____
DISTRICT #___ TEACHER #____ GRADE____

SUBJECT_____
NO. OF STUDENTS PRESENT_____

	ACTIVITY	BEGINNING TIME	ENDING TIME	TIME IN MINUTES
1				
2				
3				
4				
5				
6				
			TOTAL	

7/17/80

BLANK ALLOCATED TIME LOG

BT2

1.219

STATE Atlantic
DISTRICT Eastern
SCHOOL New Delpen
TEACHER Casini

ALLOCATED TIME LOG

STATE # 03 SCHOOL # 08 DATE 10/5
DISTRICT # 47 TEACHER # X105 GRADE 3

SUBJECT Reading/Lang.
NO. OF STUDENTS PRESENT 16

	ACTIVITY	BEGINNING TIME	ENDING TIME	TIME IN MINUTES
1	Reading groups	8:51	10:01	70
2	Reading groups and language seatwork	10:30	10:57	27
3	Spelling	12:59	1:16	17
4	Sustained silent reading	2:30	2:50	20
5				
6				
			TOTAL	134

7/17/80

COMPLETED ALLOCATED TIME LOG

BT3

1.220

243

244

BLANK ENGAGEMENT RATE FORM
(Front of Form)

STATE _____
DISTRICT _____
SCHOOL _____
TEACHER _____
CODER _____

ENGAGEMENT RATE FORM

STATE # ____ SCHOOL # ____ DATE _____ GRADE ____ PART OF CLASS OBSERVED Beg.____ Mid.____ End ____

DISTRICT # ____ TEACHER # ____ CODER # ____ # STUDENTS PRESENT ____

	TIME	1	2	3	4	5	6	7	8	9
READING/LANGUAGE ARTS	ASSIGNED									
	MANAGEMENT/ TRANSITION									
	SOCIALIZING									
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING									
	OUT OF ROOM									
	TOTAL UNENGAGED									
	ENGAGED									
MATHEMATICS	ASSIGNED									
	MANAGEMENT/ TRANSITION									
	SOCIALIZING									
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING									
	OUT OF ROOM									
	TOTAL UNENGAGED									
	ENGAGED									
	OTHER ASSIGNED									
	PULL OUT ASSIGNED									
	NO. OF STUDENTS PRESENT									

BLANK ENGAGEMENT RATE FORM
(Back of Form)

	TIME	10	11	12	13	14	15	TOTAL	ENGAGEMENT RATE
READING/LANGUAGE ARTS	ASSIGNED								ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION								
	SOCIALIZING								
	DISCIPLINE								
	UNOCCUPIED/ OBSERVING								
	OUT OF ROOM								
	TOTAL UNENGAGED								
	ENGAGED								
MATHEMATICS	ASSIGNED								ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION								
	SOCIALIZING								
	DISCIPLINE								
	UNOCCUPIED/ OBSERVING								
	OUT OF ROOM								
	TOTAL UNENGAGED								
	ENGAGED								
	OTHER ASSIGNED								
	PULL OUT ASSIGNED								
	# STUDENTS PRESENT								

BV5 is a videotape clip illustrating the scanning process used during classroom observations.

7/24/80

BT6a

COMPLETED ENGAGEMENT RATE FORM

(Front of Form)

STATE Atlantic
DISTRICT Eastern
SCHOOL New Dalpen
TEACHER Casini
CODER Demetrios

ENGAGEMENT RATE FORM

STATE # 03 SCHOOL # 08 DATE 10/5 GRADE 3 PART OF CLASS OBSERVED Beg. ___ Mid. ✓ End ___

DISTRICT # 47 TEACHER # X105 CODER # 384R # STUDENTS PRESENT 16

	TIME	1	2	3	4	5	6	7	8	9
		10:35	10:36	10:37	10:38	10:39	10:40	10:41	10:42	10:43
READING/LANGUAGE ARTS	ASSIGNED	16	16	16	16	16	16	16	16	16
	MANAGEMENT/ TRANSITION				1			11	1	1
	SOCIALIZING		11			111				
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING	1	111	11	1111	1	111		11	1111
	OUT OF ROOM									
	TOTAL UNENGAGED	1	5	2	5	4	3	2	3	5
	ENGAGED	15	11	14	11	12	13	14	13	11
MATHEMATICS	ASSIGNED									
	MANAGEMENT/ TRANSITION									
	SOCIALIZING									
	DISCIPLINE									
	UNOCCUPIED/ OBSERVING									
	OUT OF ROOM									
	TOTAL UNENGAGED									
	ENGAGED									
	OTHER ASSIGNED									
	PULL OUT ASSIGNED									
	NO. OF STUDENTS PRESENT								1	

7/24/80

BT6b

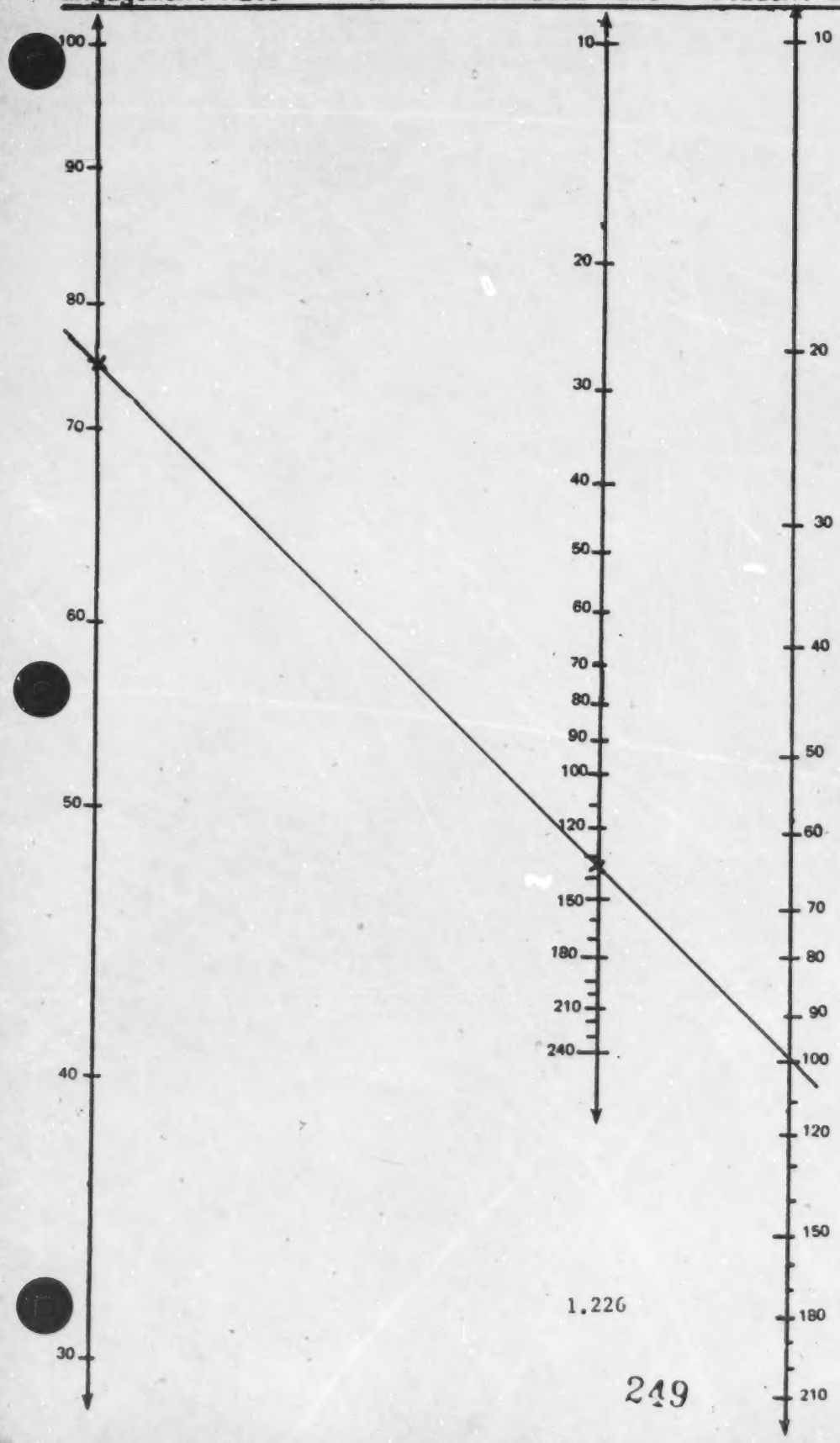
COMPLETED ENGAGEMENT RATE FORM

(Back of Form)

	TIME	10 10:44	11 10:45	12 10:46	13 10:47	14 10:48	15 10:49	TOTAL	ENGAGEMENT RATE
READING/LANGUAGE ARTS	ASSIGNED	16	16	16	16	16	16	240	ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION	1			11	11		10	180/240 = 75%
	SOCIALIZING	—						5	
	DISCIPLINE						16	16	
	UNOCCUPIED/ OBSERVING	11			11	111		27	
	OUT OF ROOM	1	1					2	
	TOTAL UNENGAGED	4	1	0	4	5	16	60	
	ENGAGED	12	15	16	12	11	0	180	
MATHEMATICS	ASSIGNED								ENGAGED / ASSIGNED
	MANAGEMENT/ TRANSITION								
	SOCIALIZING								
	DISCIPLINE								
	UNOCCUPIED/ OBSERVING								
	OUT OF ROOM								
	TOTAL UNENGAGED								
	ENGAGED								
	OTHER ASSIGNED								
	PULL OUT ASSIGNED								
	# STUDENTS PRESENT								

COMPLETED TIME NOMOGRAPH

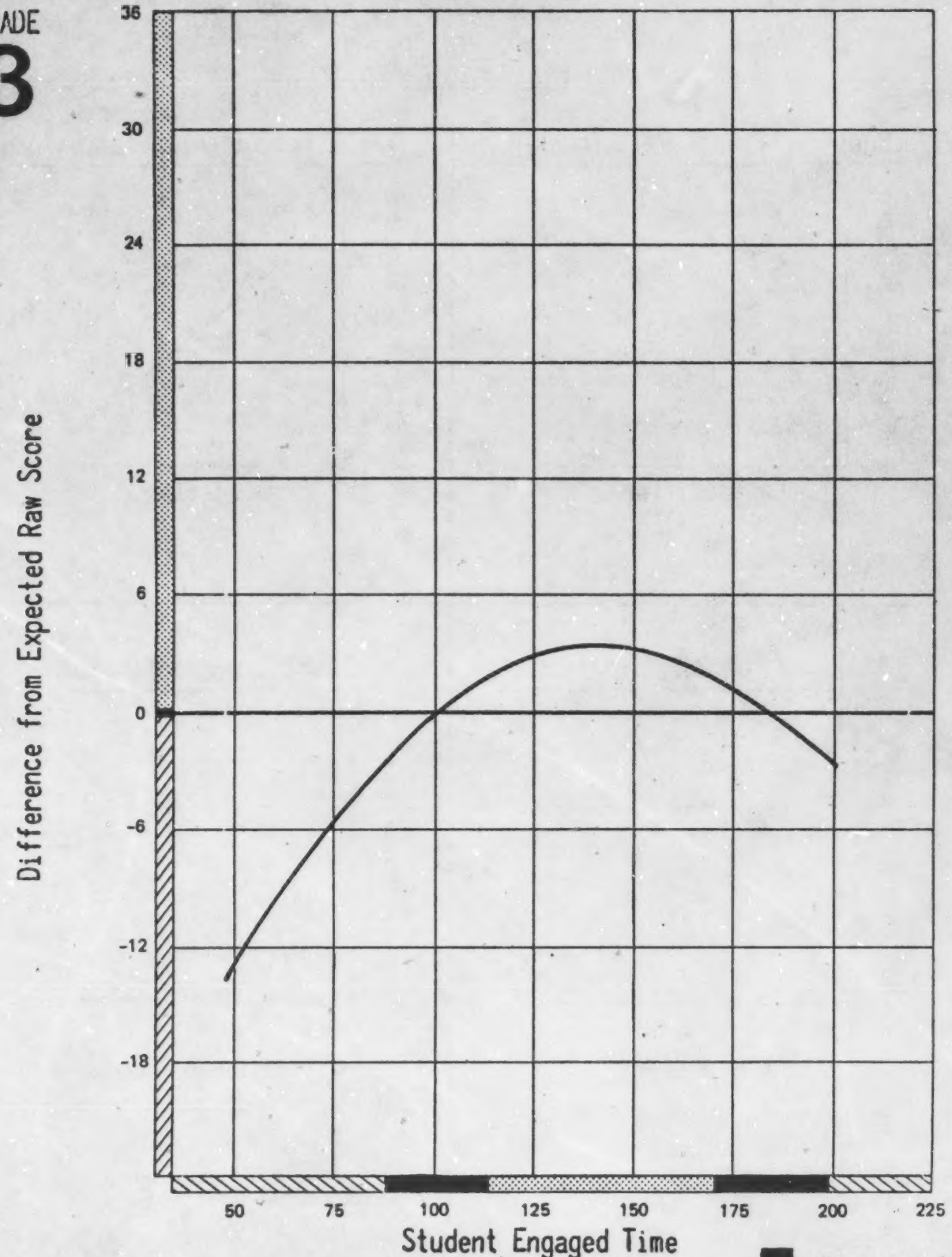
Engagement Rate x Allocated Time = Student Engaged Time



1.226

READING AND LANGUAGE TOTAL

GRADE 3



Minimum change of at least 13 minutes.

--Above expected level of achievement

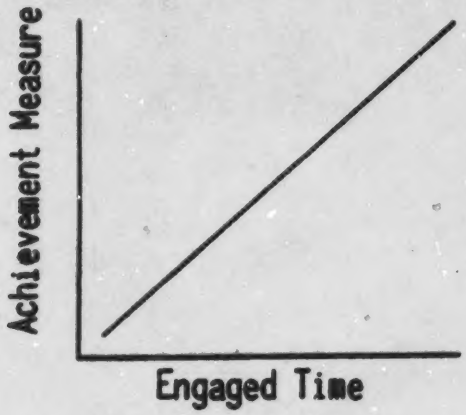
--At expected level of achievement

--Below expected level of achievement

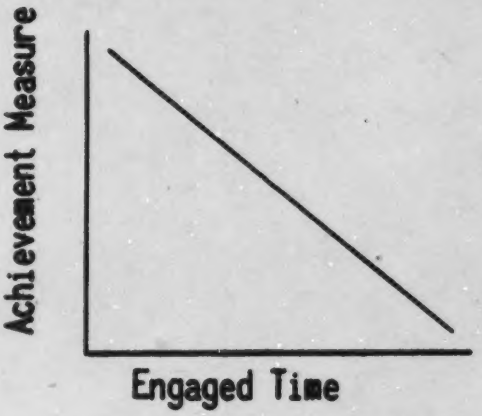
Source: Stallings & Kaskowitz (1974)

TYPES OF GRAPHS

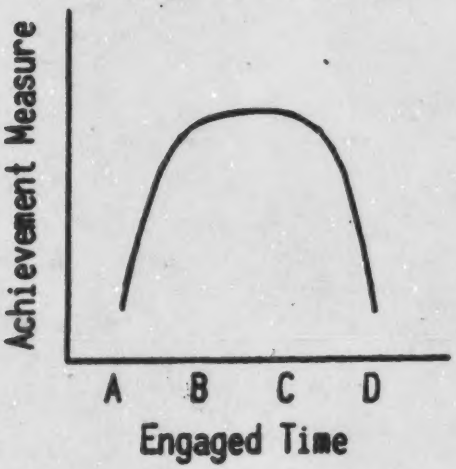
Positive Linear Relationship



Negative Linear Relationship



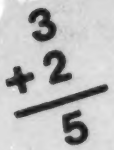
Inverted "U" Relationship



"Threshold" Relationship

Selected Program Modifications

Management/Transition



- In order to reduce the time children spend waiting for help, give students <u>alternate assignments</u> to complete when help is not immediately available. You may also assign a peer tutor, give each student a sign to raise for help, or use a sign-up sheet or the board for students to indicate that they need assistance.[1,3]
- Spend 50-75 percent of <u>math class time</u> on meaningful developmental activities and 25-50 percent on drill and practice. Developmental activities include teacher demonstrations, teacher explanations, group discussions, work with manipulative materials, and laboratory activities. Individual pupil tasks such as assignments in textbooks, kits, dittos, or tapes are "drill and practice." [4,6]

Socializing

- Increase <u>teacher-student academic interactions</u>. Ask students more questions.[3,6]
- During recitation, keep <u>students "on their toes."</u>[7]
- <u>Move around the room</u> regularly and systematically.[1,3,7,8]

Discipline

- Let students know which behaviors are desired and which will not be tolerated. <u>Expectations</u> should be clearly stated in behavioral terms. Teach them the skills of good behavior.[1]
- Give students specific <u>feedback</u> (both positive and negative) specifying what the student should be doing and/or what was undesirable about the misbehavior.[1]
- Particularly for students of low socioeconomic status, have individual <u>conferences</u> with misbehaving students.[5]

Unoccupied/Observing

- Project a positive attitude about academic work. Display work well done.[1]
- Increase teacher-student academic interactions. The more often a student is involved in academic interaction with the teacher, the higher his/her engagement rate.[3,5]
- Check students' work by looking at papers or listening to oral responses. Student answers should be visible to the teacher. Nonperformers should be brought into the recitation. The teacher should circulate, checking performance during recitation. Unison responses with the teacher selectively listening for individual answers may be used.[3,7,8]

Strategies to Increase Allocated Time

- Keep a log of how time is actually spent in each subject area each day. Use this information to try to increase the time available for reading and/or mathematics.[2]

References

[1]Anderson, L. M., Evertson, C. M., Emmer, E. T. Dimensions in classroom management derived from recent research. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979.

[2]Berliner, D. C. Selected findings from Phase III-B, BTES Beginning Teacher Evaluation Study Supplement, 1978.

[3]Fisher, et al. Final report of Phase III-B, Beginning Teacher Evaluation Study in Beginning Teacher Evaluation Study Technical Report Series, 1978.

[4]Callahan, L. G., & Glennon, V. J. Elementary school mathematics: A guide to current research, 1975.

[5]Evertson, C. M. Relationship of teacher praise and criticism to student outcomes, 1975.

[6]Good, T. L., & Grouws, D. A. The Missouri Mathematics Effectiveness Project: An experimental study in fourth-grade classrooms. Journal of Educational Psychology, 1979, 71(3), 355-362.

[7]Kounin, J. S. Discipline and group management in classrooms. Huntington, N.Y.: Robert E. Krieger Publishing Company, 1977.

[8]McKenzie, G. R. Effects of questions and test-like events on achievement and on-task behavior in a classroom concept learning presentation. The Journal of Educational Research, 1979, 72(6), 348-351.

APPENDIX C

SUPPLEMENT TO TOPIC C
RATIONALE FOR FOCUS ON TIME

This appendix consists of two parts. The first part provides suggestions for supplementary activities for Topic C (topic outline, materials, and notes), while the second part is a paper discussing "Research Findings on Time."

SUPPLEMENTARY ACTIVITIES FOR TOPIC C--
RATIONALE FOR FOCUS ON TIME
(60 minutes)

Rationale. Some leaders may wish to provide additional details about research findings on time or about other measures of time or to provide activities involving computations with different measures of time. Such activities are outlined here. These activities might replace those outlined in Topics C.3 and C.4.

Materials	Strategy
--Calculators CT11--Measures of Time CH12--Estimate Your Time	Show CT11 while discussing research on school year, attendance year, school day, and allocated time. Note the constraints each previous factor places on succeeding factors. The levels (state, district, building, teacher policy) influencing each measure are discussed. Have participants complete CH12 after discussing allocated time.
CH13--Time Nomograph CH14--Engagement Rate and Student Engaged Time CH15--Calculating Student Engaged Time 1T16--Flow Chart for Computing Student Engaged Time* 1H17--Time Definitions Worksheet* 1T18--Answer Key for 1H17* 1H19--Student Engaged Time Worksheet* 1T20--Answer Key for 1H19*	Discuss engagement rate and student engaged time, noting research results and the factors that shape each. Show participants how to use the nomograph and the flow chart, and then have participants do CH14 and CH15. Participants should work independently on 1H17 and 1H19.
1H21--Time Glossary; (a-b) Selected References*	1H21 is provided to all as a summary or review. Discuss academic learning time as a composite measure involving time, content, and success. Point out that the program will include independent measures of each of these variables.

*Included in Topic C.

Rationale for focus on time--Continued

Alternative Strategies

1. Session leaders should feel free to add to, substitute for, or eliminate some of the research findings. Appendix C provides additional information, a bibliography, and handout.
2. The definition of terms may be presented first, together, followed by a summary of research.
3. Leaders may wish to reproduce and hand out the paper in Appendix C or parts of that paper in lieu of presenting research results orally.
4. Leaders may omit discussion of 3a-c, school year, attendance year, and school day, and CH12.
5. 1H21, Time Glossary, may be handed out early in the session.
6. See the alternate agendas in Appendix A.

3. Various measures of time have been studied: (CT11) (60 minutes) (See Appendix C)
   a. School year
      (1) First limit on amount of schooling
      (2) Define school year (number of days scheduled for student attendance)--1st limit on amount of schooling
      (3) Role of state mandates and funding policies in determining
      (4) Research findings on length of average school year: 173-183 days
      (5) Research findings on relation to student achievement vary--probably due to lack of control of other important variables, e.g., content covered, length of school day, time allocated to various subjects
      (6) Another reason for scarcity of findings on relation of student achievement to length of school year is lack of variance in length of school year
   b. Attendance year
      (1) Definition--number of days in year a student attends
      (2) Reduces school year--another limiting factor on amount of opportunity
      (3) Role of student, home, community, peers, and school in shaping

(4) Research findings

(a) One study of Title I class shows attendance reducing school year an average of 45 days or approximately 25%.

(b) Philadelphia-Federal Reserve Bank Study

(i) Better attendance, the more reading score increased

(ii) Fewer unexcused absences, the more reading score increased

c. School day

(1) Definition--number of hours per day students are in school

(2) Another constraint on opportunity to learn

(3) Role of state, district, union policy

(4) Research findings--average school day: 5-6 hours

d. Allocated time

(1) Definition--time teachers set aside for instruction in a content area

(a) Amount of time scheduled or planned for instruction is one measure

(b) However, amount of time planned or scheduled is changed by spontaneous, unplanned events that cause variation in day-to-day opportunity to learn. Records of when instruction actually begins and ends verify this

(2) Again a limit on opportunity to learn

(3) Role of district, building, and teacher

(a) Wide teacher-to-teacher variations
(e.g., 2nd grade math 30 min. - 59 min.
2nd grade reading 34 min. - 127 min.)

(b) Shows impact of teacher on student opportunity and achievement

(4) Research

(a) BTES Phases II and III--allocated time positively related to student achievement

(b) BTES Phase II findings on allocated time always reported for a specific setting (size of group, type of supervision [teacher, aide, independent work])

(i) Time allocated to math for total group instruction by teacher at 5th grade level positively related to student achievement in math

(c) Increasing time (alone) does not necessarily increase achievement

(i) What is covered--also important

(ii) May be possible to allocate too much time

e. Worksheet (CH12)

(1) Estimate total allocated time

(2) Estimate attendance during total allocated time (Use principal's average daily attendance figure)

(3) Awareness of total amount of time available

(4) Year long implication of minor change in daily allocated time

f. Engagement rate

(1) Introduction

(a) 175 hours of instruction in math provided

(b) Student in attendance 170 of those hours

(c) Student not apt to be attending 100% of time because of talking, daydreaming, socializing, etc.

(d) Thus, another measure for rate of engagement is introduced

(2) Definition

(a) The percent of the allocated time that a class is perceived to be actively working, or engaged in, learning

(b) Or, another measure of engagement rate is the percent of students engaged in instruction at any given moment of a class

(3) Influences on engagement rate

(a) Student--attentiveness

(b) Teacher--management procedures

(c) Building--interruptions (e.g., intercom)

(d) District--schedule of specials and pullouts

(4) Research findings

(a) Averages: 60-80%

(b) Variations: 50-90%

(5) Engagement rates related to achievement--California Beginning Teacher Evaluation Study found students with higher engagement rates learn more

(6) Also, measures involving engagement rate are related to achievement, particularly a measure called student engaged time--to be defined shortly

(7) Worksheet examples on engagement rate (CH14)

(a) Engagement rate = $\frac{\text{number engaged}}{\text{number assigned}}$

(b) Completion of worksheet

(c) Engagement Rate Form involves similar computations

8. Student engaged time

(1) Definition

(a) amount of time a student is actively engaged in attending to academic instruction or tasks

(b) Productive time = allocated time x engagement rate

(2) Research

(a) Some studies have found stronger relationships between productive time and achievement than between allocated time and achievement (Fisher, Marliave, Filby, 1975).

(b) Time alone is not strongest indicator--how time is spent is also important.

†(c) Follow Through Classroom Observation Evaluation: 1972-1973 by Stallings and Kaskowitz

(i) Time child involved in reading or math highly and positively correlated with math and reading achievement

(ii) Time measure used in instructional improvement approach is student engaged time

(iii) Data used for comparison in Phase Two are from the Stallings & Kaskowitz Follow Through Study

(3) Use of nomograph (CH13)

(a) Purpose

(i) Tool for multiplying

(ii) Can use to estimate answer

(iii) Can use calculator instead

(iv) Can be used to estimate/check work on calculator

(b) Procedures

(i) Need straightedge--ruler or sheet of paper

(ii) Locate allocated time on allocated time scale

(iii) Locate engagement rate on engagement rate scale

(iv) Place straightedge on point for allocated time and for engagement rate

(v) Point where straightedge crosses student engaged time scale is student engaged time

(4) Example with nomograph (or participants may use calculator)

(a) Allocated time = 120 min.

(i) Locate on allocated time scale

(b) Engagement rate = 80%

(i) Locate on engagement rate scale

(c) Place straightedge along those two points

(d) Reading student engaged time--approximately 96 minutes

(5) Worksheet examples on student engaged time (CH14)

(a) Student engaged time = allocated time × engagement rate

(b) Calculating allocated time, engagement rate, and student engaged time (CH15)

(6) Worksheets (1H17, 1T18, 1H19, 1T20)

(7) For summary or review (1H21)

h. Academic learning time

(1) Term used widely in the publishings of the California Beginning Teacher Evaluation Study

(2) Definition--amount of time a student spends attending to academic tasks while performing with a high rate of success

(3) Research

(a) The more academic learning time a student accumulates, the higher his/her achievement

(b) High correlation with achievement test scores

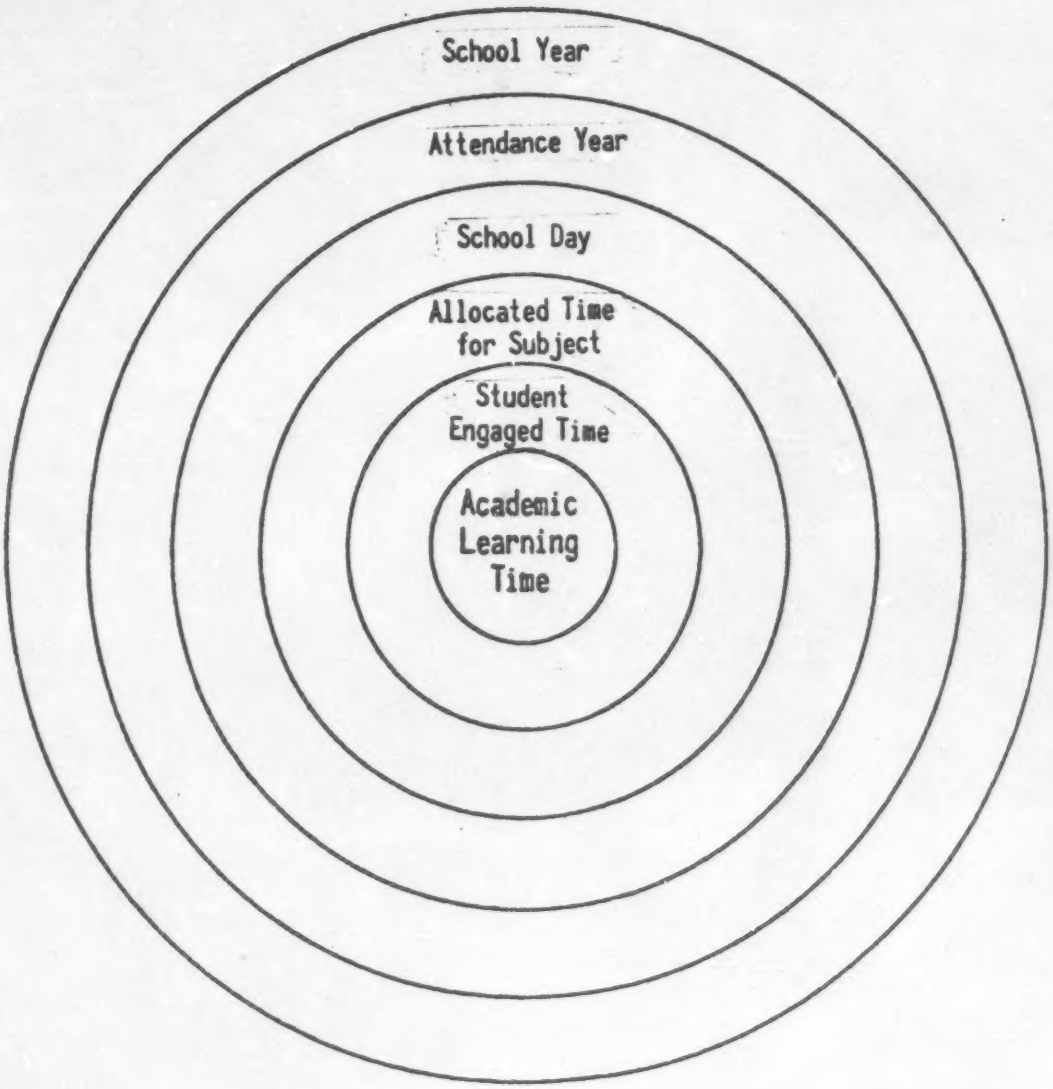
(4) In this program, time and instructional overlap are studied separately

Materials

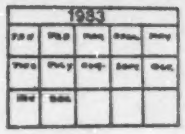
In addition to the materials included here, the following materials from Topic C are needed:

1T16	Flow Chart for Computing Student Engaged Time
1H17	Time Definitions
1T18	Answer Key for 1H17
1H19	Student Engaged Time
1T20	Answer Key for 1H19
1H21 (a-b)	Time Glossary; Selected References

MEASURES OF TIME



6/19/80



ESTIMATE YOUR TIME

CH12

1. Record the number of days in your school year. _____

   To approximate the number of days in your average student attendance year, multiply the number of days in your school year by your school's percent of average daily attendance.

   _____

   Record the number of hours in your students' school day. _____

   Record the number of minutes per day you normally allocate for each area:

   (1) Reading/Language Arts _____ (2) Math _____

2. Find the total amount of time you allocate over one school year to:

	days in school year	x	hours allocated to subject in school day		
Reading/Language Arts	_____	x	_____	=	_____
Math	_____	x	_____	=	_____

3. Find the total amount of time a student is likely to be present for instruction over a year in:

	days in student attendance year	x	hours allocated to subject in school day		
Reading/Language Arts	_____	x	_____	=	_____
Math	_____	x	_____	=	_____

4. Write the letter of the definition beside the corresponding aspect of time.

_____ School year

_____ School day

_____ Attendance year

_____ Allocated time

a. Number of hours in a day that students spend in a school.

b. Number of days in the school year that an average student actually attends school.

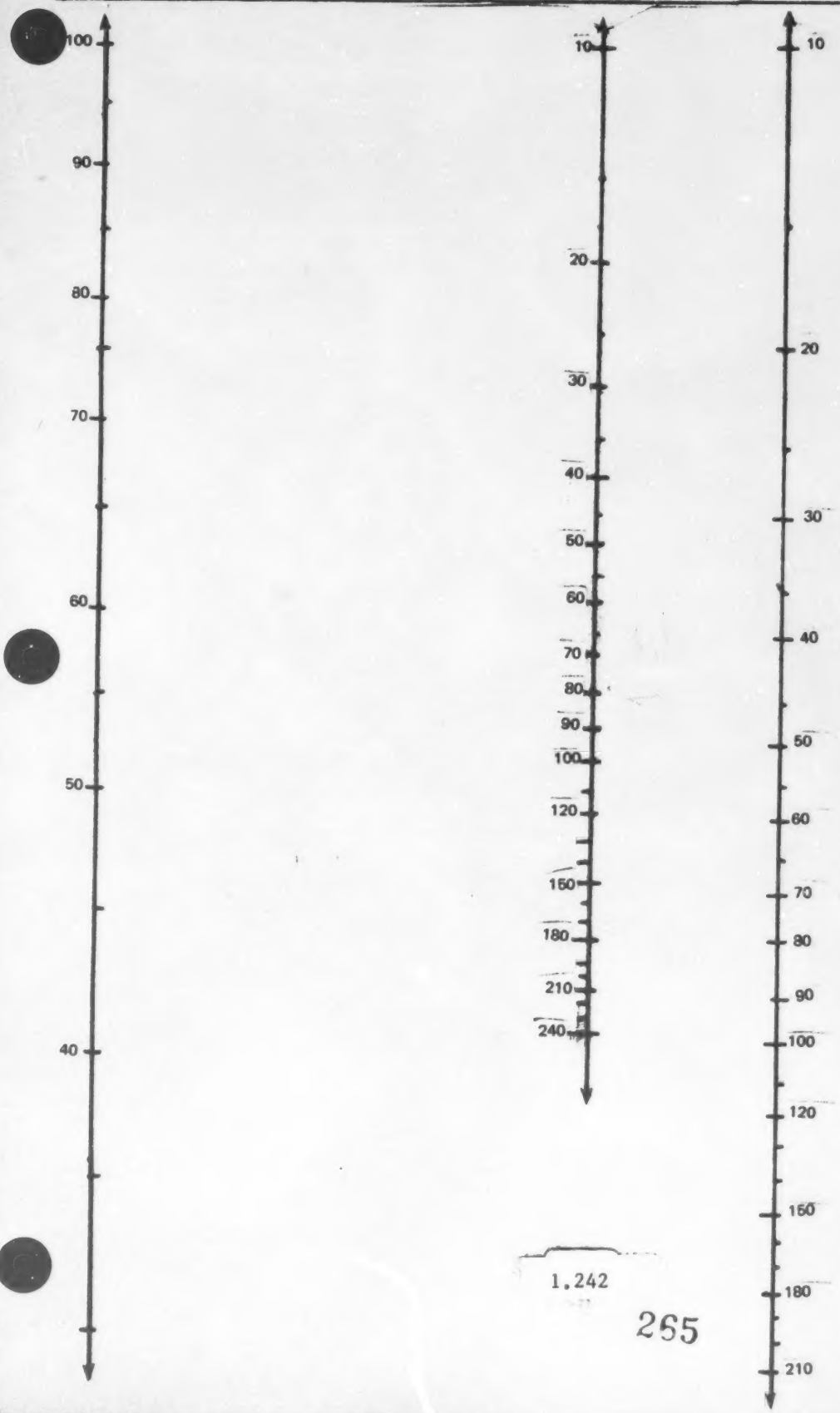
c. Number of days during which schools are open to students.

d. Number of minutes in the teaching day available for instruction in a specific content area.

4) c, a, b, d

TIME NOMOGRAPH

Engagement Rate X Allocated Time = Student Engaged Time



1.242

ENGAGEMENT RATE AND STUDENT ENGAGED TIME

Definition Match

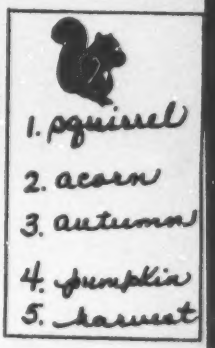
1. _____ Student Engaged Time
   _____ Engagement Rate
   _____ Allocated Time

a. Percent of assigned students engaged for a specific time period.

b. Number of minutes spent on instruction in a subject area.

c. Number of minutes during which students actually do work related to a specific content area (i.e., student is on-task).

Calculations for New Delpen's Fourth Grade



2. On September 20th Jim Heindrick's fourth grade spelling class was observed once every minute for eight minutes. All 25 students present were assigned to a group spelling lesson. A record of five of the observations is shown below.

Time	10:31	10:32	10:33	10:34	10:35
# unengaged students	15	2	5	8	5
# engaged students	10	23	20	17	20

Use your calculator to find the engagement rate at:

$$\text{engagement rate} = \frac{\text{number engaged}}{\text{number assigned}}$$

10:31 $\frac{10}{25}$ = 40% 10:32 $\frac{23}{25}$ = ___%

10:33 $\frac{20}{25}$ = ___% 10:34 _____ 10:35 _____

$$\text{Student Engaged Time} = \text{Allocated Time} \times \text{Engagement Rate}$$

Find the student engaged time on each day. Write your answer to the nearest minute.

3. On September 20th, the average engagement rate for Jim's class was 78%. If his class was 60 minutes long, what was the student engaged time? (Use the Nomograph to help you.) _____

4. On September 21st, Jim's math class was 60 minutes long and the average engagement rate was 85%. What was his class' student engaged time on 9/21? _____

5. On September 22, Jim's math class was only 50 minutes long but the average engagement rate was 90%. What was the student engaged time on 9/22? _____

1) c, a, b 2) 92%, 80%, 68%, 80% 3) 47 min. 4) 51 mins. 5) 45 min.

1.243

$$\text{Engagement rate} = \frac{\text{total number of students engaged}}{\text{total number of students assigned}}$$

$$\text{Student engaged time} = \text{engagement rate} \times \text{allocated time}$$

1. Jerome Kenyatta's fifth grade math class was observed by Tad Tallchief on September 21. The large group math class started at 10:35 and ended at 11:40. The data for the number of students engaged and unengaged is presented below. Find each aspect of time indicated below.

TIME	10:36	10:37	10:38	10:39	10:40	10:41	10:42	10:43	10:44	10:45	10:46	10:47	10:48	10:49	10:50	TOTAL
# students unengaged	17	10	5	0	2	3	1	4	5	8	2	1	0	2	2	62
# students engaged	13	20	25	30	28	27	29	26	25	22	28	29	30	28	28	388
# students assigned	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	450

a) Engagement Rate _____ b) Allocated Time = _____ c) Student Engaged Time = _____

1.244

2. Ann Riley's sixth grade language arts class was observed by Peter Demetrios on October 3. Peter observed a language arts class that started at 1:15 and ended at 2:15. The data for the number of students engaged and unengaged during the time Peter observed are recorded below. Find each aspect of time indicated below.

TIME	1:16	1:17	1:18	1:19	1:20	1:21	1:22	1:23	1:24	1:25	1:26	1:27	1:28	1:29	1:30	TOTAL
# students unengaged	25	5	1	0	0	0	10	4	3	2	2	1	0	1	2	56
# students engaged	0	20	24	25	25	25	15	21	22	23	23	24	25	24	23	319
# students assigned	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	375

a) Engagement Rate _____ b) Allocated Time = _____ c) Student Engaged Time = _____

3a) 86% b) 65 min. c) 56 min. 4a) 85% b) 60 min. c) 51 min.

RESEARCH FINDINGS ON TIME

Allocated Time

Data from four separate studies indicate that, in general, teachers allocate between 96 and 133 minutes each day for reading/ language arts and 37 to 53 minutes for math (see Table 1).

Table 1

Average Time Allocations in Minutes for Reading/ Language Arts and Mathematics

	Mann Study (1928)	Beginning Teacher Evaluation Study Phase II (1976)		Instructional Dimensions Study (1977)		Beginning Teacher Evaluation Study Phase III (1977)	
	Grade 3	Grade 2	Grade 5	Grade 1	Grade 3	Grade 2	Grade 5
Reading	70.4	63.6	54.9	105.8	84.5	86	112
Language Arts	62.8						
Math	39.2	37.5	48.0	48.6	52.6	37	42

Although state regulations and funding programs have to some extent standardized the length of the school year and the school day, teachers can exercise some control over how much of that time is allocated to a particular subject. Studies have, in fact, shown that there is extreme variation among teacher allocations. For example, Dishaw (1977) reports that time allocated for second

grade math ranged from a low of 30 minutes to a high of 59 minutes and for second grade reading from 34 minutes to 127 minutes. Time allocated for fifth grade math ranged from 23 minutes to 76 minutes; time allocated for fifth grade reading ranged from 57 to 156 minutes. These differences in allocated time suggest that some students may have two or three times as much opportunity to learn specific academic content as other students. Common sense suggests that the greater the student's opportunity to learn, the greater likelihood he/she will learn. Thus, through the relatively simple act of allocating time in reading/language arts and mathematics, teachers can affect student achievement.

Three separate studies that indicate that allocated time is positively related to student achievement are the Beginning Teacher Evaluation Study Phase II, Phase III of the same series of studies, and the Instructional Dimensions Study. The Beginning Teacher Evaluation Study (McDonald & Elias, 1976; Fisher et al., 1977) is a four-year series of studies begun in 1972 to provide a research base to guide decision making for the California Commission for Teacher Preparation and Licensing. One study (BTES-II) was conducted by the Educational Testing Service of Princeton, New Jersey, and the other study (BTES-III) by the Far West Laboratory of San Francisco. The third study, the Instructional Dimensions Study (IDS), was conducted by Hugh Poynor and his associates (Brady et al., 1977). This last study tested the instructional model developed at the Learning Research and Development Center at the University of Pittsburgh, using a sample of Title I eligible schools from five states, mostly in the Northeast.

In the BTES-II study, the relationship between student achievement and allocated time was always reported along with the type of setting in which instruction was received. The setting included the size of the group (individual, group, whole class) as well as the type of supervision (teacher, aide, student or students working independently). Any summary of the study's findings on the relationship of allocated time and student achievement is made even more difficult, since the findings varied by grade level and subject. One consistent finding for fifth grade math was that time allocated to total class instruction (by the teacher) in math was related positively to achievement in math.

The results of the BTES-II study also showed, however, that time allocated to some settings is related negatively to achievement. For example, time allocated to second graders working in reading groups without a teacher was related negatively to reading achievement; time allocated to second graders working on math in groups with an aide was also related negatively to achievement in math.

The BTES-III study showed that allocated time related in varying degrees to student achievement. For example, in second grade reading, allocated time related positively with subtests for total comprehension and word structure, but did not relate to total reading score. In fifth grade reading, allocated time did not relate either positively or negatively to total comprehension. In both second and fifth grade math, allocated time was related positively to a subtest on fractions, but was related positively to total math achievement only in the fifth grade.

In the Instructional Dimensions Study (IDS), the relationship between student achievement and allocated time was always reported in conjunction with curricular overlap (the extent to which what was taught was similar to what was measured on the criterion test). After pretest scores were taken into consideration, the variable including time and curricular overlap accounted for the majority of the variability in the posttest scores. In other words, the study found that, of those variables examined, the second most influential variable (after previous learning) is a combination of allocated time and curricular overlap.

Engagement Rate

Two of the three studies mentioned above also gathered data on engagement rate. The IDS indicated that the average engagement rate for reading and math was about 60 percent when data on student involvement were compared with data from teacher logs. In the BTES-III study, the rate for reading and math was about 75 percent when student involvement data were compared with teacher allocated time data gathered through systematic observation. The differences in the two rates are probably due to the fact that general management activities, transition time, and "down time" (when no activities were assigned to students) were not included in the BTES-III data, but were included in the IDS; that is, absolute allocated time was used in BTES-III data, but intended allocated time was used in the IDS study.

Student Engaged Time

It was stated previously that in the BTES-III study, allocated time was related only sporadically to total achievement. Engaged time, however, was related positively to total reading achievement in second and fifth grades and to total math achievement in fifth grade. Another research study relating engaged time to student achievement was completed by Jane Stallings and David Kaskowitz. This 1972 study involved classrooms throughout the country that were using sponsored Follow Through program models. A reanalysis of the data (Rim and Coller, 1978) showed that, in general, the more engaged time spent in reading or math, the more students showed achievement in that subject. However, in the case of certain aspects of reading and math, gains in student achievement did not always increase as engaged time increased. Expected gains in achievement sometimes leveled off and then decreased when engaged time was increased beyond a certain point. In other instances, expected gain in achievement leveled off and then rapidly increased again.

REFERENCES

Brady, M. E., Clinton, C., Sweeney, J. M., Peterson, M., & Poyner, H. Instructional dimensions study. Washington, D.C.: Kirschner Associates, 1977.

Dishaw, M. Descriptions of allocated time to content areas for B-C period: Beginning Teacher Evaluation Study (Tech. Note IV-2b). San Francisco: Far West Laboratory, 1977.

Fisher, C. W., Filby, N. N., Marliave, R., Cahen, L. S., Dishaw, M. M., Moore, J. E., & Berliner, D. C. Teaching behaviors, academic learning time and student achievement: Final report of Phase III-B Beginning Teacher Evaluation Study in Beginning Teacher Evaluation Study Technical Report Series (Tech. Rep. V-1). San Francisco: Far West Laboratory, 1977.

Harnischfeger, A., & Wiley, D. E. The teaching-learning process in elementary schools: A synoptic view. Curriculum Inquiry, 1976, 6, 5-43.

Mann, C. H. How schools use their time: Time allotment practice in 444 cities, including a study of trends from 1826-1926. New York: Teachers College, Columbia University, 1928.

McDonald, F. J., & Elias, P. J. The effects of teaching performances on pupil learning: Beginning Teacher Evaluation Study Phase II (Final Report). Princeton, N.J.: Educational Testing Service, 1976.

Medley, D. M. Teacher competence and teacher effectiveness: A review of process-product research. Washington, D.C.: American Association of Colleges for Teacher Education, 1977.

Rim, E. & Coller, A. In search of nonlinear process-product functions in existing schooling effects data: A reanalysis of the first-grade reading and mathematics data from the Stallings and Kaskowitz Follow Through Study. Philadelphia, Pa.: Research for Better Schools, Inc., 1978.

Stallings, J. A., & Kaskowitz, D. H. Follow through classroom observation evaluation, 1972-1973. Menlo Park, Calif.: Stanford Research Institute, 1974.

Wiley, D. E., & Harnischfeger, A. Explosion of a myth: Quantity of schooling and exposure to instruction, major educational vehicles. Educational Researcher, 1974, 3 (4), 7-12.

APPENDIX D

SUPPLEMENTARY ACTIVITY FOR TOPIC D--
ENGAGEMENT RATE FORM

One activity involving identifying engaged and unengaged behaviors is described here. You may wish to include this activity in your presentation of Topic D after viewing the videotape on unengaged behaviors (D.4) and before completing the coding of the classroom pictures (D.5). This activity may also be used in conjunction with the definitions on 1H22 as a part of orientation.

The following materials are included in this appendix:

DH27--Chart of Engaged and Unengaged Behaviors

DT28--Answer Key for Chart

Participants will also need the following handout from Topic D:

1H22--Definitions of Categories for Engagement Rate Form

In using these materials, have participants independently identify the engaged and unengaged behaviors on the chart using the definitions on 1H22 and then check and discuss answers.

CHART OF ENGAGED AND UNENGAGED BEHAVIORS

If the student is engaged, write E in the Engaged Column. If the student is unengaged, write one of the following letters to describe how the student is unengaged in the last column.

M = Management/Transition
S = Socializing
D = Discipline
U = Unoccupied/Observing

Students Assigned to Reading/Language Arts

Situation	Engaged	Unengaged
Student is reading aloud during a reading group.		
Student is giving an answer to the teacher's question about the story she read.		
Student is coloring a picture to go with a story he just read.		
Student is waiting at desk with hand raised to have reading workbook checked.		
Student is talking with anocher student about lunch.		

Students Assigned to Mathematics

Student is looking at teacher during presentation of math content.		
Student is getting number rods from the cabinet.		
Student has her head and math textbook in appropriate relative position for reading problems.		
Student is calling out answers when presented with math flash cards.		
Student is listening to teacher reprimand another student for not doing his homework.		
Student is building a tower of 20 Cuisenaire rods while assigned to solve 5+3, 2+6, and 1+7 with rods.		

CHART OF ENGAGED AND UNENGAGED BEHAVIORS

If the student is engaged, write E in the Engaged Column. If the student is unengaged, write one of the following letters to describe how the student is unengaged in the last column.

M = Management/Transition
S = Socializing
D = Discipline
U = Unoccupied/Observing

Students Assigned to Reading/Language Arts

Situation	Engaged	Unengaged
Student is reading aloud during a reading group.	E	
Student is giving an answer to the teacher's question about the story she read.	E	
Student is coloring a picture to go with a story he just read.	E	
Student is waiting at desk with hand raised to have reading workbook checked.		M
Student is talking with another student about lunch.		S

Students Assigned to Mathematics

Student is looking at teacher during presentation of math content.	E	
Student is getting number rods from the cabinet.		M
Student has her head and math textbook in appropriate relative position for reading problems.	E	
Student is calling out answers when presented with math flash cards.	E	
Student is listening to teacher reprimand another student for not doing his homework.		D
Student is building a tower of 20 Cuisenaire rods while assigned to solve 5+3, 2+6, and 1+7 with rods.		U

APPENDIX E

SUPPLEMENTARY ACTIVITIES FOR TOPIC E

OBSERVER TRAINING ON THE ENGAGEMENT RATE FORM

This appendix contains the materials and notes for six supplementary five-observation videotape segments (Supplementary Tape for Appendix E). Leaders may wish to use one or more of these segments as review or extra practice in appropriate situations. A description of each segment follows; the segments are sequenced according to their difficulty, with the easier ones first.

EV32d	Middle of first grade reading; teacher-directed whole class lesson on single and double consonants and naming and describing words
EV32e	Continuation of EV32d
EV32f	Middle of fourth-grade reading; teacher-directed correction of workbooks with whole class
EV32g	Middle of first grade math; seatwork (continuation of lV32c)
EV32h	Middle of sixth grade math; teacher-directed whole-class review of homework and recording of scores followed by new assignment and seatwork
EV32i	Continuation of EV32h

If supplementary tapes are needed or desired, Research for Better Schools will provide regional agencies with a tape, handouts, transparencies, and notes in return for a blank 1-hour tape.